UrbanBuzz:

Evaluation of a niche professional social networking site

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Acknowledgements

Abstract

UrbanBuzz is a two-year knowledge exchange program that seeks to find better ways of building sustainable communities. One of its main goals is to break down the professional divides, or silos, that exist among professions and academic disciplines to enable cross-disciplinary knowledge exchange. It does this by funding multi-disciplinary knowledge exchange projects. The social networking feature of the UrbanBuzz website was created to bring together potential collaborators from different silos, who might never have met face-to-face, for project proposals. This study investigated how this niche professional social networking site was used by UrbanBuzz members. UrbanBuzz managers, project coordinators, and event attendees were interviewed about their experiences with and views of the UrbanBuzz social networking feature and online professional networking in general, and interview transcripts were analyzed using grounded theory methods. The analysis identified four barriers to success faced by the UrbanBuzz social networking feature: a small and homogenous network population, which limited growth; program-specific profile information, which was insufficient for users' needs; a design that supported one purpose, which became irrelevant as the population and program evolved; and members who were not motivated to make new professional contacts online. Based on these findings, it is argued that general professional social networking sites are more likely to succeed than niche ones; that the growth, population, and information needs of professional social networking sites may be different from those of mainstream social networking sites; and that much more research on professional social networking sites is needed. Implications are drawn for developers of niche and general professional social networking sites, and suggestions are given for future research.

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1 Introduction

This study investigates UrbanBuzz, a university-run knowledge exchange program for professionals interested in building sustainable communities, and the social networking feature of its website (www.urbanbuzz.org). The study used a qualitative approach to collect and analyze data: UrbanBuzz members were interviewed about their experiences with and views of the UrbanBuzz social networking feature and online professional networking in general, and interview transcripts were analyzed using grounded theory methods. Findings from the analysis were related to existing literature on social networking sites and online communities, and implications for professional social networking sites were drawn.

UrbanBuzz is a two-year program that seeks to find better ways of building sustainable communities through knowledge exchange projects. It is based in London and funded by the Higher Education Funding Council of England. One of its main goals is to break down the professional divides, or silos, that exist among professions and academic disciplines to enable cross-disciplinary knowledge exchange. It does this by funding multi-disciplinary projects and facilitating professional networking through offline events and the website's social networking feature.

UrbanBuzz offered anyone who was interested in building sustainable communities a chance to get funding for his or her own project. However, to encourage cross-disciplinary collaboration, project proposals had to have collaborators from different silos (e.g., academia and industry). The social networking feature was created to bring together potential collaborators from different silos who might never have met face-to-face for project proposals.

The UrbanBuzz social networking feature allows members to present themselves and their work in online profiles, search for and view other members' profiles, add "contacts" to their online networks, leave public feedback for members or project ideas, and send private messages to members. Essentially, it allows members to search for and create connections with other members with similar professional interests.

Although the UrbanBuzz website is technically a social networking site, as it supports the technical features that define social networking sites (see Section 2.1), UrbanBuzz managers do not view it as such. They view the website primarily as an information portal with a social networking functionality that is just one feature of the UrbanBuzz website and overall program of funded projects and networking opportunities. Therefore, this report uses the term *social networking feature* rather than *social networking site* to distinguish between the social networking functionality and the UrbanBuzz website as a whole.

This study was meant to be a follow-up to Hutchinson (2007). The study set out to re-evaluate the UrbanBuzz community to see if it had overcome four barriers to community participation and knowledge exchange that Hutchinson had identified. However, one year later, the issues that Hutchinson identified were no longer relevant to the two-year

program. At the time of Hutchinson's study, the UrbanBuzz community was most concerned with the submission of project proposals and the allocation of funding. One year later, with UrbanBuzz no longer funding new projects and the end of the program drawing near, UrbanBuzz managers were most concerned with leaving a legacy of project-based deliverables and a continuing network of professional contacts.

UrbanBuzz managers expressed interest in knowing if the innovative social networking feature had helped members break down silos. Also, there is almost no research on social networking sites created for professional networking. Therefore, this study aims to investigate how the social networking feature is used by UrbanBuzz members.

Chapter 2 of this report reviews literature on social networking sites and online communities that emerged as relevant to the findings of this investigation. Chapter 3 describes the qualitative approach used to collect and analyze data. Chapter 4 presents the main findings and identifies barriers to success faced by the UrbanBuzz social networking feature. Chapter 5 relates the barriers to existing literature, discusses the implications of the findings for social networking sites in general, and considers the limitations of the study. Finally, Chapter 6 suggests opportunities for future research.

2 Literature review

The social networking site (SNS) is a relatively recent phenomenon. The first SNS, SixDegrees, was launched in 1997. However, they did not receive traditional media coverage until the success of Friendster in 2003 (boyd & Ellison, 2008). Since then, hundreds of SNSs have been launched, supporting a variety of purposes and populations. There are mainstream SNSs (e.g., MySpace, Facebook); there are SNSs for specific purposes like business networking (e.g., LinkedIn), dating (e.g., OkCupid), media-sharing (e.g., Flickr), and blogging (e.g., LiveJournal); and there are SNSs targeting specific populations based on characteristics like organization affiliation (e.g., MyChurch), ethnicity (e.g., BlackPlanet), religion (e.g., Muxlim), and interest (e.g., Dogster). These types of SNSs "are limited by their target demographic and thus tend to be smaller" (boyd & Ellison, 2008, p.218).

Social networking sites have grown rapidly in the last few years and have become part of many users' daily lives (Goad & Mooney, 2007). Therefore, they are interesting to academics from many disciplines. In this chapter, the definition of SNSs is discussed, followed by three themes in the literature that emerged as being relevant to the findings presented in Chapter 4: profiles and trust, connections between online and offline social networks, and differences between professional SNSs and other types of SNSs.

2.1 Definition of a social networking site

According to boyd and Ellison (2008), SNSs are defined by three technical features: they allow members to construct a page or profile representing themselves in the system, to define their social network by creating a list of other members to whom they are connected, and to see and explore their and other members' lists of connections. The last two features, which "enable users to articulate and make visible their social networks" (p.211), are what distinguish SNSs from other types of web-based services.

The way these features are implemented varies among SNSs. Profiles can support different types of information and applications. Most sites require bi-directional confirmation for a connection between members to be made, although some allow one-directional connections. Visibility of profiles and lists of connections depend on the site and member settings. Most sites also allow members to leave public comments on profiles as well as send private messages to other members (boyd & Ellison, 2008).

There is a growing literature on SNSs. However, most studies investigate mainstream (rather than niche) SNSs based in the United States. Also, research tends to focus on the behavior of teenagers and young adults. This may be because SNSs are most popular with those populations (Ofcom, 2008), although the age gap is closing as more and more older adults join SNSs (Goad & Mooney, 2007). Other explanations may be that it is easier to recruit large numbers of participants from universities (e.g., Hargittai, 2008), that the studied SNS may be university-based (e.g., Adamic, Buyukkokten, & Adar, 2003; Ellison, Steinfield, & Lampe, 2007), and that many organizations are concerned about Internet-related risks and harm to teenagers (e.g., Ofcom, 2008).

There is more literature on online communities as they precede SNSs. deSouza and Preece (2004) acknowledge that different disciplines have different definitions for an online community, so they propose a broad definition: "a group of people, who come together for a purpose online, and who are governed by norms and policies" (p.580). By this definition, most SNSs would be considered online communities. However, most of the research has featured online communities organized around interests rather than individuals, where members interact with each other in common spaces like chat rooms and discussion boards to discuss shared interests and problems (e.g., Andrews, Preece, & Turoff, 2001; Preece, 1999), and community leaders and moderators are needed to support positive interaction (Preece, 2002). While some SNSs, especially those that started out as interest-based online communities, have these features, other SNSs may only support one-to-one communication. Even so, relevant literature on online communities is included in this chapter.

2.2 Profiles and trust

A profile is a representation of self online. It is the main way that members express their identities to others and assess the identities of other members. Although the types of information presented in profiles vary by SNS, most members are concerned about the content of the profile and the reliability of that content for assessing identity when they are considering interacting with new people.

Regarding profile content, Adamic et al. (2003) looked at a university-specific SNS and found that profiles with more content (listing more preferences and interests) had more connections (a bigger online social network). They suggest that this was attributable to the member creating the profile, hypothesizing that members who were more active or who were willing to put more effort into their profiles were more likely to connect to friends online or have more friends in the first place.

However, Lampe, Ellison, and Steinfield (2007) suggest that having more profile content, especially verifiable content, makes it easier for other members to find that profile and decide whether they want to connect to it. Looking at the profiles of university students on Facebook, they found that for every profile field (e.g., high school, favorites), profiles with information in that field listed significantly more connections than profiles without information in that field. They also found that having types of information that are easier to verify (e.g., high school, field of study) was more related to having larger social networks than having less verifiable types of information like interests and preferences. They acknowledge that members of other SNSs might value other types of information, so it is unclear how these findings would relate to profiles on professional SNSs.

Because words and images are easy to manipulate, members often look at more than a profile's self-description. There are several studies looking at the kinds of signals and cues that members use to form impressions of other members represented online (e.g., Donath & boyd, 2004; Ellison, Heino, & Gibbs, 2006). The main challenge of online interaction is that members must rely more on verbal cues like spelling ability than traditional nonverbal cues like clothing style and facial expressions to assess identity and trustworthiness. Certain cues are given more credibility than others (Donath, 2008).

Trust in general is a big issue when considering interacting with someone new. Interactions that involve more risk require more trust (Donath & boyd, 2004). Two suggestions for encouraging trust in SNSs and other types of online communities are displaying reputation information like testimonials (O'Murchu, Breslin, & Decker, 2004) and ratings (Jensen, Davis, & Farnham, 2002). Reputation information can help verify a member's self-description and also allow other members to predict future experiences with that member based on his or her past behavior (Preece, 2004). Jensen et al. (2002) found in an experiment that participants used different types of reputation information to choose new activity partners depending on the activity (e.g., chatting about movies versus playing a game). Professional SNSs often support endorsements or testimonials (O'Murchu et al., 2004), although it is unclear how they are used and whether other types of reputation information would be more useful for encouraging trust.

2.3 Online versus offline social networks

There has been much research on how online and offline social networks overlap. Early research on online communities like newsgroups found that people were forming new connections online, and that some of these connections migrated offline. Parks and Floyd (1996) found that almost two-thirds of members who responded to their survey had relationships, the vast majority platonic, with people they had met online, and that a third of them had gone on to meet their online friends face-to-face.

This assumption of online-to-offline directionality was also reflected in the early mission statements of SNSs like Friendster, Orkut, and LinkedIn, which emphasized meeting new people online through pre-existing connections (Donath & boyd, 2004). Donath and boyd even say, "The main point of social networking sites is to help people to make new connections" (p.77).

However, studies of university students using Facebook (e.g., Ellison et al., 2007) and representative samples of the UK population (Ofcom, 2008) have found that members of SNSs overwhelmingly use them to maintain pre-existing offline connections rather than establish new connections. Lampe, Ellison, and Steinfield (2006) also found that students were more likely to use Facebook to get more information about people they had met offline than browse for new people to meet offline (e.g., for dating).

Ofcom (2008) found that people with profiles are more likely to use SNSs to maintain pre-existing relationships (69%) than meet new people (17%), and that the youngest age group (16-24 years old) is more likely to use SNSs to meet new people than other age groups. The study does not hypothesize why there might be an age difference although it may not be surprising. In a study investigating the design of an online community for mid-life career changers, Andrews et al. (2001) found that potential members were resistant to the idea of interacting with people online that they had not met offline even though they were enthusiastic Internet users. Some reasons for resistance were feelings of distrust, privacy concerns, and satisfaction with establishing and maintaining connections face-to-face. Ofcom also found that most of the people who used SNSs to meet new people did so for dating purposes. This makes sense as the goal of online dating is always to move online relationships offline (Ellison et al., 2006).

In light of the offline-to-online directionality of most social network connections, it is not surprising that the growth of SNSs appears to be driven by offline networks. boyd and Heer (2006) found that participants usually joined Friendster after getting invitations from multiple friends. Also, looking at the network structure of Flickr and Yahoo! 360, Kumar, Novak, and Tomkins (2006) found that more users joined by accepting an invitation than by actively seeking out the SNSs and joining without an invitation, and that the members who were inviting others were usually more motivated by transferring an existing offline network online than by creating new connections online. Essentially, people's offline social networks can influence which SNSs they join (Hargittai, 2008).

2.4 Professional versus social networking

At the time of writing, there are few studies on business or professional SNSs. While studies may mention LinkedIn or other professional SNSs to make a point about different features of SNSs (e.g., boyd & Ellison, 2008; Donath & boyd, 2004), they are usually not the focus. There are almost no studies looking at the members or practices of a specific professional SNS, or discussing the differences between professional SNSs, considered a niche type of SNS, and mainstream SNSs.

The exception is O'Murchu et al. (2004), which compares five mainstream SNSs with five professional SNSs. They argue that the most important difference is the range of information that can be displayed in profiles and used in searches. Professional SNS profiles represent a member's professional identity and therefore tend to be relatively impersonal. While mainstream SNSs might allow members to search by age and gender (e.g., for dating), professional sites typically allow searching by job position and employer, and both types tend to allow searching by interests and location.

Harguittai (2008) found that even relatively similar mainstream SNSs like MySpace and Facebook attract different populations, so she warns that findings from research on one SNS cannot be generalized to all SNSs. Professional SNSs should be investigated on their own because their profiles present different types of information; they target unstudied social networking populations, professionals rather than teenagers or university students, who have different needs, motivations, and behaviors; and they tend to place more importance on the ability to meet new people online (for platonic reasons).

2.5 Summary

Based on the literature, profile content is important for facilitating connections between members, and some types of information engender more trust than others; SNS use and growth is driven by offline-to-online migration of social networks; and much research is needed on professional SNSs, which are different from mainstream SNSs in many ways.

In contrast to general professional SNSs like LinkedIn, which target all professionals and support a variety of interactions, this study investigates a niche professional SNS that was created to support the UrbanBuzz program by helping professionals meet new collaborators online based on common professional interests. This study aims to evaluate UrbanBuzz members' motivations and behaviors, user needs for professional SNSs, and differences between niche and general professional SNSs.

3 Method

This study used a qualitative approach to collect and analyze data about UrbanBuzz. This approach primarily followed guidelines set by Charmaz (2006), which in turn are based on grounded theory methods developed by Glaser and Strauss (1967). The approach consisted of interviewing stakeholders, categorizing and organizing interview data into a coherent narrative, and reviewing relevant literature.

3.1 Grounded theory

Grounded theory methods were chosen for this study in part because it is a follow-up study to Hutchinson (2007), in which this qualitative approach was used successfully to uncover a "'grassroots' level of understanding" of UrbanBuzz. In addition, initial interviews with UrbanBuzz management revealed that important themes from Hutchinson (2007) were no longer relevant to the UrbanBuzz program. Hence, a flexible approach that could be used to discover and pursue new themes from interview data was needed.

According to grounded theory, analysis should start with the data rather than pre-existing theories or frameworks to enable construction of original theory "grounded" in that data. Also, data should be analyzed as it is collected to direct how further data should be collected. Data is studied and categorized through coding. Codes are compared, and emergent themes are explored and developed through written notes called memos. Memos are sorted and organized to reveal relationships between themes, and a theory is constructed that can explain those relationships.

Charmaz (2006) provides systematic but "flexible guidelines, not methodological rules, recipes, and requirements" (p.9) for qualitative research. As emergent themes guided further data collection and analysis, the method for this study developed as the investigation progressed. As suggested by Charmaz, techniques were used when and as needed.

3.2 Data collection

Participants were 14 stakeholders who represented different views of UrbanBuzz. There were 3 members of UrbanBuzz management, 8 project coordinators, and 3 members who had attended several UrbanBuzz events (1 of whom was also part of a project team). Of the project coordinators and members, 6 were from higher education institutes, 4 from private sector consulting organizations, and 1 from a non-profit organization.

Table 3.1 shows participants and their characteristics. Participants are referred to by number in Chapter 4. Participant numbers were given based on role and organization type rather than interview order to protect the anonymity of participants.

Table 3.1

Participant number	Role	Organization
Participant 1	Senior manager	UrbanBuzz
Participant 2	Senior manager	UrbanBuzz
Participant 3	Manager	UrbanBuzz
Participant 4	Project coordinator	Higher education institute
Participant 5	Project coordinator	Higher education institute
Participant 6	Project coordinator	Higher education institute
Participant 7	Project coordinator	Private sector consulting organization
Participant 8	Project coordinator	Private sector consulting organization
Participant 9	Project coordinator	Private sector consulting organization
Participant 10	Project coordinator	Private sector consulting organization
Participant 11	Project coordinator	Non-profit organization
Participant 12	Project member	Higher education institute
Participant 13	Events attendee	Higher education institute
Participant 14	Events attendee	Higher education institute

Aside from those in UrbanBuzz management, participants were selected from target groups of members and recruited by email. From 30 possible project coordinators, 17 representing different backgrounds and project types were contacted; 11 responded positively and 8 were interviewed. In addition, based on an attendance list for all UrbanBuzz events before June 2008, 37 members who were not project coordinators (event attendees) had attended three events. The 9 event attendees that provided email addresses on their online UrbanBuzz profiles were contacted; 5 responded positively and 3 were interviewed. Participants were not compensated in any way. UrbanBuzz managers do not know the identities of the other participants.

Most participants were interviewed individually in person. However, Participants 2 and 3 were interviewed together, and two other participants were interviewed over the phone because they worked outside of London. All interviews were recorded and transcribed. Participants 8, 9, and 11 also answered interview follow-up questions by email.

Interviews were semi-structured to allow for exploration of new themes as they emerged. Questions for the initial interviews with UrbanBuzz management were based on findings from Hutchinson (2007). Those initial interviews helped guide participant selection and form a set of interview questions for UrbanBuzz members. In turn, subsequent interviews guided further questions and participant selection. New questions, such as characteristics participants looked for in new collaborators, were added to follow up on interesting themes that had emerged from previous interviews, while questions about issues that turned out to be irrelevant to participants were dropped. Also, as event attendees were found to not use the UrbanBuzz social networking feature, more project collaborators were selected and interviewed.

Content from the UrbanBuzz website (www.urbanbuzz.org) was examined to gain additional information about the UrbanBuzz program. The social networking feature was reviewed through creation of an online profile, search and examination of other profiles, and attempts to link to participant profiles.

3.3 Analysis

Transcribed interviews were analyzed using initial line-by-line coding followed by focused coding. Initial line-by-line coding involved studying each line of a transcript and labeling segments (i.e. lines) of data with codes describing the content of each segment. Codes were written next to lines of transcript. Recurring codes indicated emergent themes from that transcript.

Focused coding involved comparing significant codes across transcripts and looking for common emergent themes. Common themes were represented by different colors, and colored pencils were used to color-code common themes across all transcripts. This helped to visually sort and connect data from different transcripts.

Ideas about themes were developed through writing. As writing progressed, it became clear that some themes could not be related to others under an overarching theme. These themes were discarded while those remaining were expanded and explored in more depth through re-examination of transcripts. Relationships between these themes (e.g., whether they were similar or conflicting) were further analyzed until a coherent written narrative was constructed that could explain how and why they were related.

3.4 Validation

All participants had a chance to comment on the results of the analysis. Each participant was emailed a draft of Chapter 4 and told his or her participant number. Participants were asked to verify that their quotations were used correctly and their views were accurately represented, and also that they felt their anonymity was protected. Eight of the 14 participants responded, and minor modifications to Chapter 4 were made.

4 Results

The investigation revealed participants' experiences with and views of UrbanBuzz's online social networking feature, and their views of online professional networking in general. Quotations are included to illustrate participant views. The following notation is used:

- "`I:`" indicates the interviewer in a conversation.
- "`P:`" indicates the participant in a conversation.
- "`...`" before a quotation indicates that the quotation starts mid-sentence.
- "`...`" after a quotation indicates that the quotation is cut off before the end of the sentence.
- "`[...]`" within a quotation indicates that a non-essential part of the quotation has been edited out to shorten it and improve clarity.
- A word or phrase in brackets indicates that something has been replaced to protect the anonymity of the participants, to clarify what the quotation is referring to, or to correct the grammar to fit the current context of the quotation.

This chapter describes use of the UrbanBuzz social networking feature along with four key themes that emerged from interviews. Participants discussed problems posed by two aspects of the UrbanBuzz network: the population and the information available. They also discussed needing a reason to network in general. Finally, they speculated about future use of professional SNSs. These findings indicate possible challenges to creating successful professional SNSs.

4.1 UrbanBuzz social networking feature

The social networking feature is just one part of the UrbanBuzz website and overall program of funded projects and networking opportunities. Participant 1, a senior manager at UrbanBuzz, says managers wanted

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to make a social networking site that [was] successful for a group of
people with a serious task who [didn't] know each other.
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So although Participant 1 envisioned members continuing to use it after UrbanBuzz projects had received funding, the social networking feature was created with a specific purpose: to bring together potential collaborators from different silos for innovative, multi-disciplinary project proposals.

UrbanBuzz management hopes to leave a legacy of "genuine connections between people [and] social networks," according to Participant 1, and interviews indicate that most participants have met new people and made useful contacts at UrbanBuzz events and through UrbanBuzz projects. However, regarding the social networking feature, interviews suggest that while some project coordinators have tried using the feature to make new contacts, only one has successfully found project collaborators through the website. Possible factors contributing to this are presented in subsequent sections.

4.1.1 Levels of usage

All project coordinators should have used the social networking feature because they were required by UrbanBuzz management to connect with collaborators online before submitting their project proposals. Participant 4 explains,

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We linked mainly because we were thinking about submitting a project
together, and there was kind of a push by UrbanBuzz: connect on the
website or otherwise you're not allowed to submit the project.
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Most of the collaborators of the project coordinators that were interviewed were either existing contacts or new contacts that were not found using the social networking feature. Only Participant 6 found collaborators for a project proposal by actively contacting new people through the online network.[1] Also, Participant 5 was contacted by someone interested in his project, but he was not invited to join the team until Participant 5 later "… just bumped into him at one of the Buzz meetings." It is unclear how much they communicated online before meeting in person, but according to Participant 5, "that was sort of part, that was the reason why he ended up on the team." So Participant 5 got a collaborator after responding to a contact through the online network.

Table 4.1 summarizes each participant's reported use of the social networking feature to make new contacts, the outcome, and other approaches used to find collaborators. As the table shows, participants who were not project coordinators did not use the social networking feature. Participants who were part of UrbanBuzz management were not asked about their use of the social networking feature and so are excluded from this table.

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[1] It should be noted that this project proposal was rejected, and Participant 6 did not use the social networking feature to find collaborators for his project that ultimately got funded.

Table 4.1

Participant	Used search box	Contacted someone	Was contacted	Outcome	Other approaches
4	No	No	Yes	No useful contacts	Used existing network of contacts
5	No	No	Yes	1 new collaborator	Used existing network of contacts
6	Yes	Yes	?	Many new collaborators	"went wider than UrbanBuzz"
7	No	No	No	N/A	Used existing network of contacts
8	Yes	Yes	?	No useful contacts	Used existing network of contacts, looked for new collaborators offline
9	Yes	No	?	Could not use feature, gave up	Trawled Internet for new collaborators
10	Yes	Yes	Yes	No useful contacts	Looked for new collaborators offline
11	?	No	Yes	No useful contacts	Trawled Internet for new collaborators
12	No	No	No	N/A	
13	No	No	?	N/A	
14	No	No	No	N/A	

? = could not be determined from interview
N/A = not applicable

4.1.2 Usability issues

Some participants strongly disliked the UrbanBuzz website. Participant 4 exclaims,

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[The web developers] really managed to create the most terrible social
networking site I ever seen.
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Participant 9 agrees that the website is

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... unusable, and I think you'll, if you speak to the [UrbanBuzz]
Programme Office, they will heartily agree with that, that it's
actually, yeah, that it's not a good site.
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Participant 5 experienced technical problems with the social networking feature. For example, when he responded to other members inviting him to add them to his online network,

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... a lot of them said, "I don't know what you're talking about. I
never got in touch with you. Go away."
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He later adds,

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I couldn't make this work anyway, really. It never quite seemed to
work, you know. I mean, there was a lot of funny things that went on in
the early days.
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UrbanBuzz managers are aware that there were and still are problems with the website. The website was revamped in December 2007 to improve "… the look and feel of the website to make it more intuitive," and some usability issues were fixed. However, Participant 1 still admits that "the usability side of the website […] is absolutely bloody awful."

Subsequent sections will describe themes that emerged that may explain why so few participants used the social networking feature successfully. Usability issues will only be discussed if they are related to these themes.

4.2 Network population

The UrbanBuzz social networking feature was created for a very specific population, the members of UrbanBuzz, who themselves tend to represent only a small segment of the professional world: academics and practitioners around London who are interested in exchanging knowledge about building sustainable communities. Therefore, it is a niche professional SNS created for a niche knowledge exchange program.

According to Participant 14, who has visited many professional SNSs, it is common for them to target specific populations based on profession or interests.

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I: So when you say business social networking, do you find they're
usually, um, very specific? Are they usually very niche?
P: Yeah, yeah. They're very niche. Like the [social networking site] we
have here is niche too.
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For example, Participant 14 is involved in two projects that have added social networking features to their websites. The one mentioned above is for customers of a university-affiliated service. Also, Participant 4 works with a charity that has created a professional SNS for a certain type of entrepreneur.

However, being niche limits the potential population of the UrbanBuzz network both in size and diversity. This has implications for its ability to provide the kind of collaborators that participants are looking for.

UrbanBuzz members, especially project coordinators, tend to be similar in at least one way. Participants 4, 6, 8, 9, 10, 11, and 14 consider themselves to be good at collaborating with other disciplines. For example, Participant 9 explains,

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I've spent the last, most of my career, working career, sort of working
with all these other disciplines, so I naturally have developed an
ability to sort of speak as many different languages that is necessary
to communicate with all these sub-disciplines.
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Participants 4, 6, 7, 10, 11, 13, and 14 mention that breaking down silos is important to their work. Regarding the boundaries between siloed groups, Participant 6 says,

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I try and resolve those boundaries wherever I can because I think
they're fraudulent. [...] I've always wanted to break down those
boundaries.
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Therefore, it makes sense that these participants would want to find collaborators from different backgrounds to satisfy their own agendas as well as UrbanBuzz project requirements.

Along a similar vein, Participants 6 and 8 report trying to use the social networking feature when they needed to find someone who could fill a skill or knowledge gap in the project team. When asked why he had used the social networking feature, Participant 8 says,

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There were some areas of our knowledge base that we thought were
missing, so we went looking for them.
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In total, Participants 5, 6, 7, 8, 9, 10, 11, and 13 mention looking for new collaborators who were different from themselves and perhaps possessed a specific skill or knowledge base. Online social networks have the potential to connect people from different backgrounds who might have never met in real life, but this task is made harder when the network population is relatively small and homogenous. Participant 10 explains why he could not find new collaborators through the social networking feature.

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I think the site is just far too small. [...] There's a number of,
let's say 300 people, and this is not a really large pool, and most of
the people are linked in a way anyway because they all have links to
UCL or to a UK academic network. But, for example, to get a developer
involved, he wouldn't be necessarily on this social networking site.
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Participant 10's claim is supported by the experiences of this study's non-academic participants. For example, Participants 7 and 8 were personally asked to join UrbanBuzz by London academics; Participants 9 and 10 were working in private firms that were told about UrbanBuzz by Participant 1, who is also a London academic; and Participant 11 used to be an academic and heard about UrbanBuzz from an ex-colleague.

Participant 10 then contrasts the UrbanBuzz network population with that of Facebook and the opportunities it presents.

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P: I think the big thing about Facebook is that you can have a look.
You can search millions of people and there might be one you've never
come across, and he has a similar idea about, um, a problem or a
project, but you wouldn't find this necessarily in UrbanBuzz.
I: Because it's so small.
P: Yes. Either people have the same, a similar background or similar
ideas because [...] it's a small group of people working on this
sustainability network. It's not about people working on economic, on
the economic side, or working on the construction industry. [...] In a
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social network, you would have people from completely different
backgrounds.
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Participant 10 found that UrbanBuzz's small and homogenous network population was a
barrier to finding the type of collaborator he wanted.

Participant 6 was the only participant who found potential collaborators by initiating
contact using the social networking feature. However, he also looked in other places,
suggesting that he could not find all of the people he needed on the UrbanBuzz network.
He says,

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I was quite clear that I needed an X and a Y and a Z [...] so I did
quite a large network search for people to back that one up, and looked
through the UrbanBuzz network. I went wider than UrbanBuzz to look for
other people.
```

Finally, even though Participant 11 needed to find many new collaborators, he did not use
the social networking feature because of his perception that the network population was
limited. He explains why he did not even try to use the feature:

```
My feeling was that the people that were from completely fresh
disciplines were almost certainly not to be on the website.
```

It is important to note that although the online network had relatively few members when
participants were looking for new collaborators (e.g., 300), the population had grown to
2500 members by the time participants were interviewed. Also, in contrast to Participant
10's comment about the early population of the UrbanBuzz network, "… we've actually
got a bigger membership now from the private sector than any of the other sectors,"
according to Participant 3, a manager at UrbanBuzz.

However, UrbanBuzz still cannot compete with the size and diversity of the populations
of general SNSs; in addition, its network population size does not reflect the number of
active users of the social networking feature.

Unlike more general SNSs like Facebook, being a niche site limits UrbanBuzz's potential
size by limiting its target population, which in turn makes it harder to attract members
from the target population who care about size. Participant 14 explains that he never
bothered trying out the social networking feature because the UrbanBuzz network was
not populated enough.

```
I looked at it, but there isn't a critical mass there. I mean, the
thing about Facebook or even MySpace is if you go on there, there's a
million before you, so it's got critical mass. It's gone beyond that
tipping point. I think that's the difficulty that there are, with
social networking sites like UrbanBuzz that have been set up for a
specific project, [...] it's like no one will go into a restaurant if
no one's there. [...] Until it's been populated, then there's no point
of going there.
```

This mentality makes it hard to attract enough members to reach critical mass in the first place.

Participants 9 and 10 are members of general professional SNSs, and they both say they joined because they were invited by friends. According to Participant 9, "… I've got certain friends who are registered, and they've sort of linked me in so to speak." This suggests that general professional SNSs grow when members invite their friends, who may belong to unrelated professions, as well as work-related contacts, who probably belong to similar professions. In contrast, niche professional SNSs are likely to grow through invitations to only work-related contacts, which, again, makes it harder to reach critical mass.

Perhaps because they knew it would be difficult to attract members, instead of waiting for people to join the social networking feature and create a profile of themselves when they wanted to engage in online social networking (or collaborate on a project), UrbanBuzz management accelerated population growth by making people "… register on our website" and create a public profile "in order to attend various types of events that we're, um, arranging and co-hosting" (see Section 4.3.2), according to Participant 2, another senior manager at UrbanBuzz. Thus the UrbanBuzz network population may include many members who have no intention of using the program-specific social networking feature because they were motivated to join by other aspects of the UrbanBuzz program.

Both UrbanBuzz management and other participants are aware that there is a difference between the number of profiles and the number of active users. Participant 2 admits that it is easy to increase "the numbers."

```
We know we can get registrations. That's bread and butter stuff, you
know. That's nothing special.
```

However, Participant 3 acknowledges the importance of active users.

```
There's probably a tipping point, isn't there? [...] there has to be
enough active users as opposed to people who've just signed up once and
didn't do anything since [...] for the actual social networking to
happen.
```

Finally, Participant 14 is not impressed by the increasing number of UrbanBuzz members online. When he was told about the latest number of profiles, he says,

```
Right, there are a lot of profiles there, but I think, from a very
scant glance, [...] the fact that no one will be using [the social
networking feature], um, is probably confirmed.
```

4.3 Information and trust

According to Participant 1, the social networking feature is "… way ahead of anything else …" he has ever seen (see Section 4.3.2). UrbanBuzz is an innovative program to encourage cross-disciplinary collaboration, and the online feature is just one aspect that had never been tried before. None of the participants had used a SNS to look for and

communicate with potential professional collaborators before. Three themes emerged regarding challenges that had to be overcome to use the social networking feature successfully: participants had to feel like they could get to know someone through online media, and they had to be provided with sufficient information about other members and their project ideas.

4.3.1 Knowing someone enough to work with them

While explaining how they get collaborators, many participants bring up what would make them want to work with somebody. They discuss positions and past work, track record and reliability, and personality compatibility.

Participants 7, 9, and 12 mention characteristics that can be represented textually: publications and past work, institution, and academic department. Participant 12 would approach "… people I would admire and whose work I would want to be associated with." Similarly, Participant 7 says he might approach "… people who've written articles or books, or people who are appearing in the trade press." Participant 9 reports looking for collaborators in certain universities and academic departments and basing his decisions on academic CVs.

Participants 7 and 12 mention characteristics that are harder to represent textually: track record and reliability. Participant 12 says,

```
Track record is quite important, being able to deliver things on time,
to schedule, to budget, and such.
```

Participant 7 says he needs to know

```
... whether they'd been known to be reliable or whether I'd actually
have to [...] stand in myself if something went wrong or whatever.
```

However, Participants 12 and 14 note that it is very hard to verify track record or reliability without personal experience or a recommendation from a trusted contact. Participant 12 explains,

```
If you put it on the website, no one believes you. I'm, you know, the
best person in the world to deliver such contracts on time, and I've
always done it, blah blah blah, where you don't really believe what
they say.
```

Participant 14 adds,

```
You may say you're the world's expert in this, but you're rubbish at
delivery. [...] So, I mean, I think there's a real problem about, it's
just verification.
```

This reflects that participants find it difficult to trust self-descriptive information posted online. According to Participant 14,

```
... it's a trust thing. [...] I think the problem about, um, would I
work with anyone in the UrbanBuzz network is that, how do I know that
they are what they say they are?
```

Participants 8 and 12 agree that trust is important but hard to establish online. In a follow-up email, Participant 8 writes,

```
There is a lot of trust involved in collaboration projects, and it's a
big ask to expect this trust to be established on the basis of a new
online community of interest and simply networked profiles alone.
```

Participant 12 adds,

```
Trust between people is really important and can't, is very difficult
to convey on a kind of electronic basis.
```

Finally, Participants 11 and 14 mention the importance of personality compatibility between collaborators. Participant 14 notes that "spark" or "vibe" cannot be manufactured. Participant 11 explains that both professional interests and personality affect people's abilities to collaborate.

```
... There's the issue about whether they get on and collaborate because
they simply love each other or hate each other's guts. [...] It's like,
you know, you throw people into a room together, and there will be
those dynamics just as much as there will be any sort of intellectual
dynamics between them.
```

While an online profile could convey a person's current job position, past work, publications, track record, and reliability, it is not useful if no one trusts the information in it. Also, while it might be possible to guess whether two people on an online dating site will get along based on cues and signals in their profiles, Participant 14 argues that there are not

```
... the same sort of signals coming off the UrbanBuzz-type ones because
[...] people aren't quite yet used to working out what the subtle cues
are.
```

All of this suggests that many participants could not get to know a person enough through online interaction alone to want to collaborate with them. Therefore, it is not surprising that Participants 7, 9, 11, 12, and 14 express a preference for working with people they have met in person. Participant 9 explains why.

```
Until you actually meet them, I don't feel that sort of, you know, and
size people up and [...] get the measure of them. You know, a name is
just a name.
```

It was only after Participant 5 met an online contact face-to-face at an UrbanBuzz event that he asked that person to join his project team.

However, sometimes participants cannot meet potential collaborators beforehand. Participants 7, 9, and 11 mention that if they are recruiting new collaborators for a project, they will usually call them over the phone to assess their abilities, reliability, and personality.

Participants 7, 9, 11, 12, and 14 place great importance on knowing a potential collaborator's reliability and personality, characteristics that are hard to ascertain through a profile. In contrast, Participant 6, who found collaborators through the UrbanBuzz social networking feature, is used to finding the types of people and companies he needs through the Internet and proprietary digital databases because he often has very specific needs that cannot be met through his existing network of contacts. Unlike the other participants, he values knowledge more than personality.

```
I: It sounds like you do a lot of that kind of thing online.
P: Oh immediately.
I: Because for you, it's not their personality that matters so much as
the product.
P: And knowledge base, you know.
I: Yeah, and because it's such a specialized field, you know you want
to find an actual match in [that specialty].
P: Yeah, we just need an X or a Y, you know.
I: Yeah, you, um, you have much more specific criteria for
collaborating.
P: Yeah, that's right.
```

It seems likely that Participant 6's comfort with searching for collaborators online, prioritization of knowledge over personality, and specific needs contributed to his success with the social networking feature.

4.3.2 Limitations of UrbanBuzz profiles

Most people registered to the UrbanBuzz website because they were considering submitting a project proposal or planning to attend an UrbanBuzz event. In order to populate the online network, UrbanBuzz management required all new members to create a public profile. However, they were aware that most members would feel too busy to do "… boring filling-in-profiles …" according to Participant 1, so they tried to make the profile creation process as short as possible.[2]

The profile form offers fields for a member's name, current organization, physical address, contact numbers, email address, and webpage. It also allows the member to upload a picture. These pieces of basic information appear at the top of the profile. The main body of the profile is meant to contain information about the member's professional activities, sectors of experience, and business skills, respectively called "business activities," "industry experience," and "skills." While members must write something

---

[2] Even this was not short enough. Participants 2 and 3 had concerns that busy professionals who wanted to attend events might be discouraged from registering if they were forced to create even a short profile. According to Participant 2, they later brought in "a shorter registration system so that people who only wanted to submit minimum info on themselves could do so without scrolling through loads of forms that they did not want to complete."

themselves to fill in business activities, industry experience and skills can be selected from lists of categories like "architecture," "developer," "regeneration," and "environment" for industry experience, and "communication," "strategy," "knowledge transfer/innovation," and "risk perceptions" for skills. Members can also add other industry experience and skills in a field for "other." However, offering categories is meant to make it easier and quicker for members to add meaningful information to their profiles: keywords that can be searched for.

This "… ability to search for people by interest […] is fundamental" to the social networking feature, according to Participant 1. It is the most innovative aspect, Participant 2 explains.

```
... it's the way you can establish people's, uh, you can connect to
people through keyword searches whether it's prescriptive keywords or
free-form text.
```

Even though the profile creation process was meant to be short, many members filled in minimal information, probably because they did not want to create a profile whether due to lack of time or lack of desire to share the information. Participant 14 explains,

```
I didn't want to put a dud. I didn't want to put a profile up there. I
had to so I put the minimum needed, and that's counterproductive
because by forcing everyone to [create profiles], you just end up
getting people like me that will put the, um, minimum data needed.
```

For example, when looking at the profiles of the 14 participants, who are relatively involved in the UrbanBuzz program, the following information is either missing or withheld from members whose profiles are not connected to that profile:
- 1 participant does not have a profile.
- 2 profiles are missing an organization name.
- 2 profiles are withholding physical and email addresses.
- 5 profiles are withholding phone numbers while 1 profile is missing it.
- 9 profiles are missing a webpage address.
- 11 profiles are missing a picture.

Finally, while 10 participants did select categories listing their industry experience and skills, only 2 wrote something about their business activities. This suggests that allowing participants to select categories to fill in part of their profiles encouraged them to put more information than they would have had they had to write something themselves.

Partly because of the way they were designed and partly because of members' unwillingness to fill them in, the profiles on the UrbanBuzz social networking feature tend to provide limited information both in quantity and quality. This was a barrier for some participants to finding collaborators.

Participant 9 was frustrated by the lack of contact information. In a follow-up email, he writes that it was easier to get contact information from an Internet search than from UrbanBuzz profiles.

```
I think during that early period I tried it out briefly for looking for
people. But quickly deduced that it was unusable for that purpose.
[...] For the purposes of contacting people, I found it next to
useless.  Far more convenient to simply Google people and get their
details that way.
```

Participant 10 found that the information in profiles, like industry experience and skills, was too general to be informative for distinguishing potential collaborators. He explains,

```
When you used the social networking site, you could get in touch with
people according to their profile, but they are not really specific.
People say what are their interests. Sustainability. [...] The
information is just so general that you don't really know whether these
are people who you could work with.
```

When looking for collaborators in general, participants are interested in a person's current position, publications and past work, track record and reliability, and personality compatibility (see Section 4.3.1). The UrbanBuzz profile only provides a field for one of these: a person's organization, although it does not have fields for job title or department. The only place to convey the rest of the information would be lumped together under business activities. However, only 2 out of 14 participants chose to volunteer extra information under business activities.

Regarding trust and verification, Participant 1 likes Facebook

```
... because they are real, in general, people are real people with real
faces. [...] He is what he says he is because he looks like it. [...]
It's pretty hard to fake when you put your photograph on it, yeah? Uh,
it's sort of verifiable.
```

This suggests that a profile picture can convince users that the profile represents a real person and can verify other information in the profile. However, only 2 out of 14 participants chose to upload a picture of themselves.

All of this suggests that most UrbanBuzz profiles would not help members to get to know each other online.

4.3.3 Sharing project ideas

UrbanBuzz management actually encouraged members to find collaborators by searching for other members with similar project ideas rather than desirable personal characteristics as represented in profiles. Before submitting project proposals, members had to post their project ideas on the UrbanBuzz website, and these project idea pages were linked to their profiles. Participants 5, 6, 8, 9, 11, and 12 report looking at other project idea pages before submitting their own project proposals.

Participants 9 and 11 suggest that UrbanBuzz management forced members to search posted project ideas by making it clear that members looking for funding for similar projects would have to work together. Participant 9 explains,

```
I was also forced to check [the website] out for the purpose of finding
out if anyone else was making a submission similar to mine, with which
I would need to collaborate.
```

Participant 11 looked through posted ideas not because he was looking for collaborators but rather because he

```
... was also mindful of the fact that UrbanBuzz were clearly looking to
create synergies and avoid overlap. Avoid sort of [...] duplication.
```

In fact, he says he did not pursue one of his project ideas in part because he did not want to work with another member who had posted a similar idea.

Project idea pages are much longer and contain more information than profiles. Therefore, they should be more helpful for finding collaborators. However, Participants 5 and 6 feel that members withheld project information to some extent due to the competitive nature of bidding for UrbanBuzz funding. Participant 5 describes being frustrated with the lack of information sharing when another member would not tell him about a project he wanted to join.

```
It was like total brush-off, you know. [...] I was sort of saying, well
look, this is what we're doing. What are you doing? [He says], "Ah
well, we're not quite ready yet. We'll tell you later, you know."
```

He is not sure that all potential project coordinators posted their ideas, and he feels that some members did not convey interest in looking for collaborators. He says,

```
... I don't remember ever seeing what the [private firm] guys were
actually proposing to do, and never, there was certainly never the
sniff of an idea that, you know, "Would you like to come and join us?"
```

Participant 6 describes how interaction with other members was not completely open because members would only reveal enough information to get the people they wanted to work with interested in working with them.

```
... The interaction, generally speaking, through the UrbanBuzz network
was not the best way at project inception. [...] a bit like poker, um,
where people were not quite revealing the totality of what they wanted
to do, that what they were trying to do was to try to get you to work
with them to add credibility to their bid, um, while you were not quite
revealing the totality of what you wanted to do, but looking for people
who you were kind of thinking would be useful to work in your bid.
```

When asked why members did not reveal everything about their project ideas, Participant 6 says,

```
P: Fear of being ripped off.
I: Is that just reflective of the competitive nature of trying to get
funding?
P: Oh yes. [...] I mean, it's ferocious. It's dog eat dog, you know.
```

Participant 5 agrees that "it's dog eat dog …" and suggests that the reluctance to share information in UrbanBuzz just reflects the real world where both academics and practitioners have to hold onto their knowledge "… because otherwise they'll get done in themselves." He adds, "It's not UrbanBuzz's fault. It's just the way the world works at the moment." Participant 6 explains,

```
In industry it's bottom line, um, and market share. [...] The academic
thing is always this idea that I must hold onto this piece of territory
because I'm known for this piece of, as it were, intellectual property.
```

Participants 5 and 6 mention that academics and practitioners often copy each other's ideas. Participant 6 explains "… that we rip each other off all the time, and it's well known." Therefore, it is not surprising that Participants 5 and 13 have had to sign restrictive contracts to protect intellectual property when collaborating with industry.

In summary, members posted project ideas because they had to, but at the same time, some may have withheld information about their project ideas to protect them from being copied and to increase their chances of getting funding. This may have made the project idea pages less informative, which may have made it harder to find like-minded collaborators. Also, Participant 6 suggests that interaction between members was not ideal because members were more concerned with finding collaborators for their own project ideas than helping others with their project ideas. Therefore, UrbanBuzz's innovative funding mechanism attracted early members to use the website and social networking feature but also impeded information sharing between members.

It should be noted that while the social networking feature was designed to facilitate finding members with similar UrbanBuzz project ideas, this is a limited way of making connections. It is not appropriate for newer members who have not posted project ideas since UrbanBuzz stopped funding projects. It may not even be appropriate for finding collaborators for non-UrbanBuzz projects because the types of projects that were proposed to UrbanBuzz, which Participant 12 says should be "… new and cutting-edge and innovative and original," would not be appropriate for "… normal, more established, long-running funding programs" which "tend to have fairly strict criteria of what they're expecting," according to Participant 9.

However, because of the emphasis on project idea pages rather than profiles as a source of information, there are few other ways of making connections. For example, members cannot search for other members by job title, qualification, academic department, or alma mater unless other members have thought to include this information in their profile themselves[3]. Therefore, it might be difficult for the social networking feature to evolve and be used in other ways.

---

[3] Even then, results can be unclear as the database is not set up to search by type of information. For example, if one searches for "Oxford," results could include members who graduated from Oxford University, who work for Oxford University, or who live in Oxford.

4.4 Networking with purpose

Participants needed a reason to make new professional contacts. In other words, participants did not network in a vacuum. Participants mention networking because of physical proximity, work requirements, and personal motives.

Participant 9 suggests that networking is more a result of physical proximity than a goal in itself.

```
You network with people because you got contact with them in the real
world, but you don't necessarily network with people just for the sake
of it.
```

Physical proximity provides a good opportunity and excuse to talk to someone new. Participants 7 and 14 both describe making new contacts at recent professional events by talking to the people who were standing or sitting nearest to them. This may be why professional events are seen as a good way to network, because they physically bring people together. Participants 6, 7, 8, 9, 10, 11, 12, 13, and 14 say that meeting new people is one reason they go to professional events.

In fact, networking is the main reason that Participants 8 and 14 attend UrbanBuzz events. Participant 14 thinks networking is "… the most important bit actually" of UrbanBuzz events. Their attitudes reflect that networking is an important part of their job descriptions. Participant 14 admits that "… the work I do is slightly unusual in that, sort of, going off on events are my bread and butter," and Participant 8 explains, "It's my job in the practice. I'm, I do a lot of networking and opportunities."

Other participants needed other reasons to make new professional contacts. Participant 11 will do it

```
... where I see a clear, something clear that I can gain from it as
opposed to sort of speculatively going around ...
```

He thinks he will network more when he wants to find a new job. Participants 5 and 6 mention how practitioners network or "schmooze" to get work for their companies. Most of the participants network when they need to find collaborators for projects.

Perhaps participants need a reason to make new professional contacts, online or offline, because they are too busy to network unless they need to. Participant 13 explains that one reason she did not try the social networking feature is that

```
I'm busy. [...] I don't think it means it's not useful, but just for my
case, I really look at so many things.
```

Participant 11 admits that he has not attended any professional events recently because

```
P: I've tended to just put those on the back-burner.
I: Because you're busy?
P: Because of being busy.
```

Participant 8 is too busy to use LinkedIn even though he thinks he ought to.

```
I don't use it that much. I should do, but it's time, you know. Time is
everything, so you got to invest your time in the right place. [...] I
just don't have the spare.
```

UrbanBuzz provides not only a professional SNS but also a good reason to network online: to find collaborators for projects to get UrbanBuzz funding. However, unlike general professional SNSs such as LinkedIn, whose infrastructure and interface supports several purposes for networking online like reconnecting with classmates and colleagues, finding a job or potential employees, asking for work-related advice, and selling products or services, the UrbanBuzz social networking feature is mainly designed for this one purpose (e.g., Section 4.3.3), which specifically supports the aims of the UrbanBuzz program.

Therefore, it is not surprising that Participants 12, 13, and 14, who are not project coordinators and so did not need to look for collaborators, have not used the social networking feature at all. Participant 13 explains that she did not try it out because "I don't feel I needed to."

Some of the project coordinators also did not feel the need to find new collaborators for their projects. Participants 4 and 7 did not need to because they already knew who they wanted to work with from their existing networks of contacts, and they knew they could rely on those contacts to recommend other contacts. Participant 7 explains that his collaborators came from his

```
... background knowledge of contacts, [...] those people I knew of,
people I wanted to involve and so on. [...] certainly well over a
hundred contacts that I knew previously, and then a lot of contacts
that people put me onto. People I knew and trusted put me onto someone
else ...
```

Participants 4 and 5, who did not actively try to find collaborators through the social networking feature, responded to invitations from other people because they felt obligated to by UrbanBuzz. Participant 5 says he was "… trying to be a good boy …", and Participant 4 explains he has a lot of online contacts because UrbanBuzz management "… said that you need to make a lot of contacts." He adds, "I use it because I was coerced to use it."

Whether they felt obligated or not, the participants who actually engaged in networking online have not used the feature since submitting their project proposals. Participant 4 and 5 initially could not remember how to get to their list of contacts because it had been such a long time. According to Participant 10, "We used it in the application process, but after that we didn't use it."

The problem with supporting only one purpose for a SNS is that that purpose may become irrelevant, which would make the site irrelevant. Without any other reason to

network, it appears that almost all networking activity stopped after the last round of UrbanBuzz projects was funded.

UrbanBuzz management is aware of this problem. Participant 1 notes that page visits had dropped to "virtually nothing" by the end of February 2008 according to web statistics. Participant 2 says about the social networking feature,

```
It had a place certainly where we were trying to foster a climate of
collaboration as part of the proposal's pre-preparation phase. [...]
That's certainly fulfilled a valuable objective. [...] I would imagine
if we did an audit of the social networking contact mail, [...] it's
probably tailed off significantly.
```

Participants 2 and 3 realize that they have to provide a new reason for members to use the feature.

```
P2: We have to give them a reason for doing it.
P3: Quite.
P2: We have to find the reason for them wanting to do it ...
```

However, they have struggled to think of another purpose for it, perhaps because the purpose must support the aims of the UrbanBuzz program, not just the general needs of members. Participant 2 says,

```
So the question is, you know, how could we revitalize, should we
revitalize? [...] we should actually work out how we can use it to
support and strengthen the whole of this year's aims.
```

4.5 Looking towards future use

Participants were asked how they felt about using professional SNSs in general. Three themes emerged: many expressed reluctance because they felt that face-to-face networking was more effective, this reluctance may have been related to age, and those who expressed optimism mentioned scenarios related to general rather than niche professional SNSs.

4.5.1 Sticking with what works

The main reasons that participants did not engage in professional networking online were that face-to-face networking was very effective and that online networking could not work as well or did not work as well yet.

Although Participant 8 is interested in networking online, he writes,

```
It's just not my priority at the moment as other networks (i.e. face to
face) appear to be working well for me right now.
```

Participants 4, 7, 9, 12, and 14 express satisfaction with the size of their professional networks, which they have created through face-to-face interaction. Participant 12 says that if he had to find collaborators, rather than going online,

```
I would rely on my own knowledge, I think, which is not kind of fool-
proof and not absolute, but I know quite a few people in most
universities.
```

Also, Participants 6, 7, 8, 9, 10, 11, 12, 13, and 14 describe situations where they successfully networked face-to-face.

However, participants had more concerns about whether it was possible to create good contacts through online networking. Participant 13 argues that a personal recommendation to or lots of personal contact with a new contact is much better "credit" than just checking a website.

```
I: You think that people only really collaborate with people they've
met?
P: And they know each other. Like I say, if [a colleague] doesn't know
me, he won't have recommended me to [other people], right?
```

Also, Participant 9 explains that a personal recommendation from an existing contact "… is worth far more …" than a recommendation or testimonial for someone on LinkedIn.

```
Just because you found somebody in LinkedIn [...] I suppose in theory
it's meant to be a personal recommendation, but it sort of doesn't work
for me ...
```

Participant 10 thinks that UrbanBuzz events are more useful than the social networking feature for making new contacts. He says,

```
So events, in contrast to let's say the network platform on the
Internet, which I think is not an opportunity to meet. It's a way to
facilitate it, but this didn't help as much as the events.
```

Participant 8 feels that it would have been better to contact a potential collaborator face-to-face rather than through the website.

```
I did make contact with an academic [...] that I had never met before
and thought he might like to join our team [...] his response was
negative. I suspect he might have helped our project if we had met face
to face and I had a chance to explain our idea in more detail.
```

From this, he has learned that

```
... the blind contact through a network, even if it's established, oh I
found you through UrbanBuzz, can you help us on this? That's nowhere
near as successful as a face to face, I've known you, I've done
business, we've been to the pub or whatever.
```

Despite these reservations, both Participants 8 and 10 later express their beliefs that professional SNSs can and will work in the future (see Section 4.5.3). Participant 14 is also optimistic. When asked whether he would engage in professional networking online, he answers,

```
I don't think anyone's cracked it yet. I keep saying that I don't think
anyone's actually worked out how to do [social networking] for a
business context yet. [...] Someone will do it one day, I'm sure.
Someone will find a model that works.
```

4.5.2 Age matters

Participants 9 and 12 suggest that younger professionals might be more likely to engage in professional social networking online because they have more free time and because they have smaller professional networks and therefore would have a greater incentive to network online.

Participant 9 sees things like blogs and online social networking as something younger professionals participate in because they are not as busy as older professionals. He says,

```
My experience through my working career is that when people are in
their thirties and they've sort of got time to spare in the office,
then they do get involved in doing blogs and all that sort of stuff.
[...] Once you get over your thirties or something and you start
working much harder and busier in life, then [...] all those sort of
frivolous activities tend to just drop by the wayside.
```

When asked why so few members had used the UrbanBuzz social networking feature, Participant 12 agrees that older professionals are busy and less likely to need connections.

```
I: I don't know if that's because all of you guys are really well-
connected so, you know, you don't need it?
P: Partly that, partly the age group. We're all probably kind of
forties, onwards. We're all busy.
```

He does think that the social networking feature was useful for less-established UrbanBuzz members.

```
I'm sure there are some young, up-and-coming academics who kind of have
used the system very effectively and have got funding, and they
wouldn't have got funding if they, you know, if they hadn't.
```

Participant 11 admits that he has a bigger network than some because he is older and has more experience.

```
I suppose I'm slightly more advanced in my career now, so you do get
people contacting you more than when you're a PhD student or something.
Um, so there is an element that [networking] gets a bit easier. Um, and
I've worked at quite a lot of places, so I have a network by virtue of
that [...] that maybe some people don't have.
```

Participants 10 and 13 are more junior and both acknowledge that they have much smaller professional networks than some colleagues. In contrast to the views of Participants 9 and 12, Participant 13 does not believe professional SNSs will help her (see Section 4.5.1).

However, Participant 10 would do it in the future to find collaborators for projects (see Section 4.5.3). When asked about the unpopularity of the UrbanBuzz social networking feature, Participant 10 agrees that age might have something to do with it, and that younger people are more likely to use professional SNSs because they are more interested in adding new contacts to their professional network. Participant 10 admits that his network is not that big

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... compared to [his manager]. Not at all. So for me, [there] would be
much more interest from [me]. [...] So it's a question of seniority."
```

Perhaps this difference of opinion reflects that Participant 13 is trying to join other people's projects and convince companies to collaborate with her, as opposed to Participant 10, who is in a position to create and manage his own project teams.

4.5.3 Bigger is better

Visions of successful professional SNSs involved general rather than niche populations and purposes.

Participant 14 suggests using the existing infrastructure of a mainstream SNS instead of creating a niche professional SNS from scratch. He says,

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I can never understand why people invest, like UrbanBuzz or [another
project] or lots of others, why they actually invest a lot of money
recreating what MySpace and Facebook already do. Why you don't grow an
UrbanBuzz group on Myspace or Facebook, because the infrastructure's
there. The tipping point's there. You'll find that lots of people have
pages anyway.
```

This is already happening to some extent on Facebook. Participant 14 reports that "… Facebook is mostly a network of people in the office." Also, Participant 5 has created an alumni group for his ex-students on Facebook.

Alternatively, Participants 4, 8, and 10 would use general professional SNSs in the future. Participant 4 is

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... totally linked in the world of LinkedIn. [...] I do think that
people look at it from time to time, so it's useful in that way.
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Participant 8 writes that LinkedIn "… is now taking off and this has taken some time and plenty of development money." He is optimistic that although the business world is not

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... social-networking based yet, it probably will get that way. I'm
sure it will get that way. When the return on investment, um, to things
like LinkedIn is proven, we'll all be doing it.
```

Finally, despite his failure to find collaborators and his view that the "… social networking site didn't work …," Participant 10 would still try using a general professional SNS to find new people for a future project. For example, he is a member of general professional SNS Xing, and he believes he could find collaborators through it.

When asked if he thought professional social networking would become more interesting in the future, he says,

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Yes, yes I think so, but I think it will focus on main providers, not
that every project creates its own social networking site.
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4.6 Summary

Most participants reported that they had met new contacts through attendance of UrbanBuzz events and participation in UrbanBuzz projects. However, focusing just on networking that occurred online, this study revealed several barriers to past and future success of the UrbanBuzz social networking feature:

- a small and homogenous active network population, which makes it harder for participants to find suitable collaborators and for the network to attract more active users;
- program-specific profiles and project idea pages, many which contain insufficient or withheld information;
- a design that supports one purpose, which is not relevant to most members;
- members who already have large professional networks and may not want to meet new people online.

Most of these issues affect niche rather than general professional SNSs, suggesting that the former is less likely to be successful than the latter. The implications of this study will be discussed in the following chapter.

5 Discussion

The main findings of the qualitative study were presented in Chapter 4. Several barriers to the success of the UrbanBuzz social networking feature were identified: a limited target population, insufficient information about members, and lack of motivation to use it. In this chapter, these barriers are related to existing literature, and implications for professional SNSs are discussed. Challenges specific to niche professional SNSs are presented, suggesting that general professional SNSs are much more likely to succeed. Finally, limitations of this study are considered.

5.1 Population and growth

Niche SNSs that target specific populations tend to be smaller (boyd & Ellison, 2008). The UrbanBuzz social networking feature not only targets a specific population, professionals affiliated with the UrbanBuzz program, but also only supports a certain type of networking, professional networking. Its active population is bound to be limited as only a certain type of person is interested in the UrbanBuzz program and in professional networking online, making it harder for the network to grow organically to reach critical mass, and making it harder for participants to find the kind of collaborators they want.

Several participants discussed how UrbanBuzz had not yet reached critical mass. An online community's critical mass is the number of members needed to attract new members and make it viable (Preece & Maloney-Krichmar, 2003). Although it is useful for explaining the success or failure of an online community, Preece and Maloney-Krichmar argue that it is hard to quantify and therefore has limited practical value.

Perhaps more relevant is that most members do not join the UrbanBuzz network through online invitations, which is how many SNSs grow (boyd & Heer, 2006). This may be partly because participants are more likely to receive SNS invitations from friends rather than colleagues, but it is mostly because people have to join the UrbanBuzz network in order to submit a project proposal or attend an event. This means that new members are more likely to enter the network with zero connections and may be more likely to never make a connection. Kumar et al. (2006) calls these members *singletons*. Kumar et al. found that even most members who responded to a friend's invitation were *passive* users, unlikely to make more than that one connection. They found that only a minority of members of SNSs were *linkers*, well-connected members at the dense core of networks who actively created new connections. Kumar et al. studied Flickr and Yahoo! 360, networks with millions of users. Niche SNSs are much smaller, so their core group of linkers will also be much smaller. This suggests that very few members in total will be actively creating new connections in a niche SNS, especially a niche SNS that does not grow through invitations, which also slows network growth.

Participants reported choosing not to look for or having difficulty finding collaborators online because of the relatively small and homogenous network population. This may not be a problem for other niche professional SNSs where members might want to meet and interact with people who are professionally similar to themselves. However, in the case

of UrbanBuzz, participants often wanted to find collaborators who were different from themselves. This suggests that they would have been more successful using a general professional SNS with a much larger and more diverse population, where they could have searched for new contacts using keywords or used their existing network of contacts (including people who were not in UrbanBuzz) to connect to contacts of contacts.

5.2 Profile information

Both Adamic et al. (2003) and Lampe et al. (2007) found that profiles with more information tended to list more connections. It makes sense that members are better able to assess the identity of strangers if there is more information in their profiles, especially since it is already difficult to assess identity online without nonverbal cues (Donath, 2008). UrbanBuzz profiles suffer from two problems: participants not filling out all available fields, and profiles not offering fields for the types of information that participants reported valuable for deciding whether they wanted to collaborate with someone. This reflects cultural (participants' motivations and needs) and technical (profile structure) constraints.

Most participants did not supply information for all of the available profile fields (e.g., basic contact information). The information they did supply about their professional skills and interests tended to be limited to generic keywords which may have helped others find their profiles, but without further profile information about their specific work, it is unlikely that other members could have got a sense of their professional identities if they did not also have project idea pages. Sparse profiles are unlikely to encourage contact between strangers.

Lampe et al. (2007) would consider lists of skills and interests as relatively unverifiable and therefore less valuable to other members than more verifiable types of information like job position, employer, and publications. Interestingly, participants did mention using these types of information (that might appear on a CV) to decide whether they wanted to work with someone new. Having more verifiable information might engender more trust about the accuracy of the profile and therefore might encourage more connections. Although UrbanBuzz profiles do not support displaying or searching for these types of information, general professional SNSs like LinkedIn do.

Trust was an issue for UrbanBuzz. Participants mentioned distrust of self-descriptive information and how it would be difficult to develop enough trust online to want to collaborate with a new online contact. Perhaps one of the reasons for this is that participants wanted to know about a potential collaborator's track record and reliability, but reputation information is also not supported by UrbanBuzz. It is supported by some general professional SNSs (O'Murchu et al., 2004), but it is unclear if reputation information like testimonials actually does engender trust and facilitate new connections. One participant expressed distrust of online testimonials because of not knowing the source of the information. (O'Murchu et al. suggests displaying the relationship between the endorser and the endorsee). Also, it is unclear whether testimonials would work for UrbanBuzz as they require members to put effort into writing testimonials for other

members they know, and members of UrbanBuzz are more likely to have joined without knowing other people already in the network (see Section 5.1).

Finally, along with verifiable CV-related information and reputation information, many participants emphasized the importance of personality compatibility. However, UrbanBuzz profiles, like LinkedIn profiles, are intentionally impersonal and business-like, with no fields for personal information. How does someone express personality to others in a professional way? This is a major limitation of professional SNSs that want to facilitate new connections between members online. Not all participants cared about personality compatibility, and this is supported by a study looking at a system that used social networks to suggest appropriate workplace collaborators. McDonald (2003) found that some participants preferred being matched with people they knew socially, while others valued expertise over social compatibility. However, for people who do care about personality, the best option might be to use SNSs that support both professional and social networking (e.g., Facebook, tribe).

5.3 Motivation and purpose

Ofcom (2008) suggests that there are five types of social networkers: Alpha Socialisers, Attention Seekers, Followers, Faithfuls, and Functionals. Most of the participants who used the UrbanBuzz social networking feature or expressed interest in using professional SNSs in the future would be categorized by Ofcom as Functionals: "(a minority) people who tended to be single-minded in using sites for a particular purpose" at a certain time (p.6). This makes sense as participants needed a good reason to engage in professional networking online or offline. According to Ofcom, Functionals would not spend time chatting or looking at others' profiles for fun, would only use SNSs occasionally, and, in contrast to the four other types of social networkers, would not care about filling in their profiles with most of their personal details.

However, these types are probably based on data from users of mainstream SNSs and therefore may not be relevant to professional SNSs (aside from the Functional type). Based on participants who were also members of other SNSs, it is likely that one person could exhibit different attitudes and behaviors for different SNSs.

The purpose of the UrbanBuzz social networking feature and, in part, other professional SNSs is to help members to expand their professional networks. However, participants mentioned not using professional SNSs because they were satisfied with the size of their professional networks and because they were too busy. Some participants suggested that these two things were related to age. This is somewhat supported in the literature. Ellison et al. (2007) found that younger university students (freshmen and sophomores) were slightly more likely to use Facebook to meet new people than older students (juniors and seniors), who presumably had bigger, more established social networks at the university. Regarding time, only teenagers and young adults reported spending too much time on SNSs and being addicted (Ofcom, 2008).

Finally, it should not be surprising that few participants used the UrbanBuzz social networking feature successfully considering that its main purpose, to meet new

professional contacts online rather than maintaining existing professional connections, challenges current use of mainstream SNSs. Most social networkers use SNSs to maintain existing offline connections (Ellison et al., 2007; Ofcom, 2008). Younger age groups are more interested in meeting new people online but usually do so for dating purposes (Ofcom, 2008). Most participants preferred to network professionally face-to-face. This suggests that the UrbanBuzz program was perhaps asking too much of its members to defy conventional behavior, although it is difficult to gauge conventional behavior without any other research on the use of professional SNSs.

5.4 Challenges facing niche professional social networking sites

Developers of niche professional SNSs should consider several issues before building a site. Because the SNS will target a specific professional population, with perhaps limited opportunities to change or expand its target population, developers should consider whether the site can meet the population's needs in the first place, and whether the site can grow and evolve.

Developers should assess the needs of the target population to ensure that the SNS is serving the right purpose for the right population. They should find out under what circumstances potential members would be interested in networking professionally and networking online, and what types of information they would need to be able to do that. They should find out in advance whether potential members will be resistant to the concept so that the SNS can be designed in a way to overcome resistance (e.g., Andrews et al., 2001). Developers should think about whether the needs of the target population can be met by a niche professional SNS at all. For instance, UrbanBuzz wanted members to break down silos and find new collaborators for innovative projects. In this case, members might have been able to find more potential collaborators from different silos by using a general rather than niche professional SNS.

Developers should consider whether there are enough potential members out there to reach critical mass so that the SNS can be successful, however success is defined. Because niche professional SNSs are less likely to grow through invitations to friends, developers should consider how to attract new members who will be active. For instance, an advertisement in a professional publication or an online professional event might be more useful for attracting enthusiastic members than requiring people to join the SNS in order to do something else (e.g., offline).

Finally, although developers might only provide the structure and features to support one purpose initially, if they want the SNS to remain relevant and useful, they should plan for the ability to change the site to accommodate evolving populations and needs. For instance, when UrbanBuzz stopped funding new projects, the population changed as new members who were not interested in finding collaborators for project proposals joined the network, so the project idea pages were no longer a useful way of searching for other members, and there was no reason for members to network. The social networking feature no longer had a purpose. This is always a danger as online communities, unlike software, are always evolving (Preece & Maloney-Krichmar, 2003).

5.5 Limitations of study

The main limitation of this study is the self-selecting nature of the participant pool. Not everyone replied to emails sent out asking for participants. People who volunteered were interviewed if an interview could be scheduled. The email mentioned that the focus of this investigation was social networking, so that might have influenced people who were more interested in, familiar with, or opinionated about social networking to respond. Also, only event attendees who listed an email address on their UrbanBuzz profile were contacted, so they might have been more involved in the UrbanBuzz program, willing to share information, or aware of the social networking feature.

The vast majority of participants were men. This matters because women are more likely to use SNSs (Hargittai, 2008) and form new relationships online (Parks & Floyd, 1996). Perhaps this study would have found higher levels of usage and successful usage if more participants had been women.

The vast majority of participants were project coordinators. Although project coordinators were pursued because they were more likely to have used the social networking feature, they were perhaps also more likely to have more established careers and professional networks, which allowed them to successfully get funding for multi-disciplinary projects. Less established members might have been more willing to use the social networking feature to make new connections (even if they did not get funding).

Finally, most participants last used the social networking feature one to two years before being interviewed. Compared to detailed descriptions of online interactions in Hutchinson (2007), participants failed to mention or could not remember relevant details about, for instance, what they were thinking when they filled out their profile information, how they searched for potential collaborators, what they thought of other profiles, how many people they tried to contact or were contacted by, and the nature of those online communications.

6 Conclusion

This study looked at a niche professional SNS, the online social networking feature of the UrbanBuzz program. The social networking feature was created to help UrbanBuzz members break down silos and find new collaborators for innovative knowledge exchange projects. UrbanBuzz managers, project coordinators, and event attendees were interviewed, and data was analyzed using grounded theory methods.

The investigation identified several barriers to successful networking faced by UrbanBuzz and most likely other niche professional SNSs: a small and homogenous target (and actual) population, which limits growth; program-specific profile information, which may be insufficient for members' needs; and a design that supports one purpose, which may become irrelevant as the population and program evolves. This suggests that general professional SNSs are more likely to succeed than niche ones. UrbanBuzz also has members who have reservations about making new professional contacts online, which might be a challenge faced by both niche and general professional SNSs.

The study also raises several questions about network growth, population characteristics, member motivations and behaviors, and profile information that should be addressed in future research on professional SNSs.

- Professional SNSs may show different patterns of growth as growth may be driven by different factors (e.g., invitations to colleagues versus friends, or lack of invitations at all).
- How do populations of professional versus mainstream SNSs differ? Presumably professional social networkers are older, but it is not known by how much. Nor is anything known about differences in gender or educational background. Populations may even be relatively similar as there may be significant overlap between users of professional SNSs and other types of SNSs.
- What motivates professional social networkers and how do they behave online? For instance, are they maintaining existing offline connections or creating new ones online? Are there more types of professional social networkers than Functionals? Although professionals claim to be busy, there may be professional social networkers who do spend a lot of time networking online.
- There may be a gap between what members need to know to make them want to meet a new professional contact online and what profiles can and do provide. How important is reputation information and personality, and can they be conveyed online in a professional way? Which types of cues and signals are seen as more credible? Which profile elements facilitate trust and connections?

One participant argued that no one had figured out how to make SNSs work in a business context yet. More research on professional SNSs is needed to help developers find the right model for professional SNSs that will allow people to use online social networks in a way that will impact their professional lives as much as mainstream SNSs have impacted people's social lives.

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