Dialectic Tensions of Information Quality: Social Networking Sites and Hiring

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The hiring process is challenging as the lack of quality information limits the discovery of the true nature of candidates, potentially leading to adverse impacts. Social networking sites (SNSs) have emerged as a potential source for candidate information with more than one billion profiles online. While abundant, the quality of this information for hiring is questionable. Utilizing qualitative interview data, the paper finds issues of quality to be complex as these technologies provide affordances that contradict one another. Tensions within dimensions of information quality were found to consist of dialectic poles: accessibility (open-restricted), contextual (relevant-unsuitable), and intrinsic (reliable-questionable). Understanding these tensions is necessary to explain the nature of perceptions of SNS information quality in the hiring context.

Key words: Social networking sites, social media, hiring, recruiting, information quality, dialectic tensions.

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Introduction

Lost productivity, wasted time, lower morale, and disruption for clients—these are just a few of the negative consequences of hiring the wrong people. The cost of recruiting and training replacements alone ranges from 25% to 500% of an employee’s salary (e.g., Morrison, 2006). Hiring professionals attempting to identify the best candidate for a position are faced with a complex information problem (Barron, Bishop, & Dunkelberg, 1985). Inherent in hiring decisions is a lack of quality information that makes it impossible to discover the true ability of candidates prior to employment; as a result the hiring processes is filled with ambiguity and uncertainty (Hendricks, DeBrock, & Koenker, 2003).

In response to this challenge, hiring professionals use multiple information sources (Massaro & Friedman, 1990) to reduce uncertainty (Berger & Douglas, 1981). Most commonly used are active and interactive observation strategies such as resumes (Dipboye & Jackson, 1999) and formal interviews.
Baron, 1986). The shortcoming of these approaches is that the candidate is aware of the observation and has the opportunity to strategically craft information for the specific audience. Passive observation is considered to be more informative because candidates are not explicitly aware that they are being observed (Berger & Douglas, 1981). However, while passive observation can be a source of quality information, it has not typically been used because it is time consuming, expensive, and sometimes even impossible to conduct (Dipboye & Jackson, 1999). Social networking sites (SNSs) are changing this.

Today, more than 1 billion people have information about themselves on SNSs such as Facebook (955+ million²), LinkedIn (175+ million³), and Twitter (500+ million⁴). In these publicly accessible virtual spaces, users disclose information about themselves (Bateman, Pike, & Butler, 2011; boyd & Ellison, 2007) by posting notes about what they do or think, updating profile information, commenting on articles, and sharing media. Because it is public⁵, SNS-based information can be passively observed by hiring professionals with relatively little effort and without the candidate being aware of the observation or its focus (boyd, 2007; boyd & Ellison, 2007). Further, since information within SNSs is persistent, searchable, and replicable (boyd & Ellison, 2007), SNSs are a valuable source for hiring professionals confronted with otherwise limited information for assessing fit between a candidate and an organization (e.g., Cable & Judge, 1996).

While SNSs are a potentially useful source, the information available through them was not submitted by candidates through formal, established application process. As a result, it may be outdated, incomplete, or even fraudulent. This creates a tension around the quality of SNS information: While SNSs may be a rich source, the possibility of irregular and variable information increases the need for information users to make judgments about its quality (Arazy & Kopak, 2011). This is part of a larger emerging trend requiring users to demonstrate “information self-sufficiency,” or being responsible for making determinations of quality on unmediated information (Lankes, 2003). Although recently in the literature there has been a growing awareness of the importance of SNS information in employment contexts, it has largely been limited to anecdotal accounts and speculative discussions of how SNSs might be used (e.g., Slovensky & Ross, 2012). This suggests a need for a better understanding of issues of quality that arise when SNS information is used by hiring professionals. To better understand the information within SNSs and its relevance in the hiring process, this study asks—what is the nature of hiring professionals’ perceptions of the quality of SNS information. To address this question, the paper introduces the theoretical foundations of SNSs as information sources, from which information quality theory and dialectic theory are drawn upon to provide insight.

Theoretical Background

SNSs are new, public environments where people can gather through mediating technologies (boyd, 2007). SNSs support social interaction (Joinson, 2008) and enrich existing offline relationships (e.g., Ellison, Steinfield, & Lampe, 2006) by allowing users to create personal profiles, identify lists of associates, send messages, and participate in discussion forums (boyd & Ellison, 2007). A defining feature of SNSs is the information-heavy profile (boyd, 2004). When creating profiles users explicitly share information about themselves, including their name, gender, date of birth, preferred language, interests, relationship status, sexual preferences, location, education, and employment history (boyd & Ellison, 2007; Ellison, Lampe, & Steinfield, 2009).

SNSs both support the creation of individuals’ social networks and make those networks publicly visible (boyd, 2007) by allowing users to specify others with whom they have social ties (Donath & boyd, 2004). This visibility means that SNS connections can be used to identify commonalities between acquaintances and determine individuals’ social positions in the larger social context (boyd & Ellison,
2007). These aspects of publicly articulated social networks can facilitate and impede formation of additional social connections and social capital leading users to strategically choose who they include in their SNS networks (Zywica & Danowski, 2008). The profile acts as a node to be connected to, and most users recognize the public nature of these spaces and admit users can find out who they are from the information they provide online (Lenhart, 2009). At the same time, online interactions are perceived to occur in less public spaces and for a short-term audience, leading individuals to express themselves freely (boyd, 2004).

Information Quality

Information quality (IQ) has been found to be of importance in a variety of information intensive contexts, including data warehouses, system reports, system use, and assessment of internet content, and a key determinant of decision quality (Stvilia, Gasser, Twidale, & Smith, 2007). Correspondingly, researchers have a long history of considering the importance of the quality of information to end users (Goodhue, 1995), with interest increasing along with the volume of available information. Prior research has focused on conceptualizing, defining, empirically assessing and identifying subjective indicators of IQ, while practitioner work has attempted to identify dimensions and measures for assessing IQ by organizational stakeholders (for a review see: Lee, Strong, Kahn, & Wang, 2002).

Underlying the IQ literature is the premise that IQ is not a unidimensional construct, but rather consists of several dimensions. While there is not unanimous agreement on the exact dimensions (Meyen & Willshire, 1997), there is a consensus that IQ consists of four key dimensions, each of which are indicated by certain characteristics (Lee et al., 2002):

1. Accessibility IQ highlights the effort involved in storing and obtaining information as reflected in its availability, convenience of access, ease of use/operations, locatability, obtainability, privacy, privileges, reliability of access, robustness, security, usableness;
2. Contextual IQ emphasizes that information must be considered within a particular task, and that in that context there is an appropriate volume, attribute granularity, completeness, comprehensiveness, currency, essentialness, informativeness, importance, relevance, sufficiency, timeliness, value-added, usage, usefulness;
3. Intrinsic IQ implies information has quality in its own right, assessed by considering its accuracy, believability, correctness, credibility, factualness, precision, reliability, objectivity, unambiguousness, unbiasedness, validity;
4. Representational IQ focuses on the presentation of information, by considering its appearance, clarity, conciseness, consistency, compatibility, comparability, format, homogeneity, identifiability, interpretability, lack of confusion, meaningfulness, naturalness, precision of domains, readability, reasonable, redundancy, representation, understandability, uniqueness.

While these IQ dimensions provide some structure to the concept of IQ, each one is itself a complex construct, with many overlapping, and not necessarily synonymous, facets (Wang & Strong, 1996). Studies have found that information users’ perceptions of IQ dimension importance vary for many reasons (Arazy & Kopak, 2011). And, not unlike the challenge facing hiring professionals, assessing quality has become more challenging as the amount, variety, and diversity of information have grown at unmanageable rates (Stvilia et al., 2007). In the quality literature, the concept of “fitness for use” has become a widely adopted view in assessing quality (Juran & Gryna, 1980). This perspective emphasizes the importance of taking information users’ viewpoints of quality, because ultimately it is these users who will judge whether or not information is fit for use (Arnold, 1992).
Dialectic Tensions

SNSs have been designed as open systems in which many types of information (e.g., text posts, pictures, videos) are possible, making it impossible to predict how they will be used (Galimberti, Ignazi, Vercesi, & Riva, 2001). The introduction of such inchoate information technologies is typically accompanied by contradictions of interpretation and tensions surrounding the assessment of capabilities, particularly with systems that enable a variety of affordances (Lyytinen & Rose, 2003; Swanson & Ramiller, 2004). Scholars have proposed that organizations prefer stability, avoiding such ambiguity or tensions (Eisenberg, 1984), as tensions and contradictions are considered a barrier to productivity (Wendt, 1998). Yet, it has also been argued that tensions and contradictions are fundamental to the nature of organizations, functioning as opportunities to change prevailing practices, perceptions, and beliefs (Putnam, 1986). Appropriately so, the concept of tensions and contradictions has played an important role in organizational theory development (Tracy, 2004).

Dialectics is concerned with the contradictions inherent in social systems (Benson, 1977), organizations (Benson, 1977; Seo & Creed, 2002) and information systems (Carlo, Lyytinen, & Boland, forthcoming; Robey & Boudreau, 1999). From the vantage of dialectical theory, contradictions are core to social interpretation and are not inherently harmful (Baxter, 1990). Rather these contradictions represent poles of perspective that frequently work against one another, creating oppositional pulls—or tensions—that vary in degree (Seo & Creed, 2002). From this perspective, tensions arise not because contradictions are simple alternatives or even necessarily mutually exclusive; rather because they consist of poles which simultaneously conflict and coexist. It is this coexistence of conflicting poles that creates a tension as it is both difficult and necessary to embrace both simultaneously.

Analysis with a dialectic lens is rooted in the assumption that both perspectives exist, and it is the tensions inherent in the dialectic relationship between them that provides meaning. Contradictions involve relationships that are complementary, mutually implicating, and polarizing (Bosserman, 1995). Contradictions are complementary in that each side of the opposition is needed for a joint outcome, as a nut compliments a bolt; mutually implicating in that the opposites imply one another, as “society implies individuals”; and polarizing in that the differences concurrently pull the opposites apart (Carlo et al., forthcoming).

As noted, SNSs are inherently complex systems. Hiring professionals can access SNSs that simultaneously support users sharing information that is both intended for a widespread and a targeted audience, that is general and specific, that is accurate and misleading, and that includes and omits detail. Given the nature of SNSs, the hiring process, and IQ, hiring professionals seeking to make quality judgments about information from SNSs must necessarily encounter dialectic tensions. The tensions highlight the subjective nature of IQ, in which IQ dimensions can simultaneously both support and reject SNSs as a source of quality information. The analysis that follows shows how dialectic tensions inherent in this context form the basis for hiring professionals’ judgments of IQ in SNSs.

Methodology

Semistructured interviews were conducted with hiring professionals recruited from a list of professionals that had existing relationships with a large university in the eastern US. On this basis, individuals from a diverse set of organizations (e.g., small businesses and Fortune 1000 companies; local, regional, national, and international firms; variety of industries) were purposefully identified (Patton, 1990). This sample was chosen to include subjects with experience and expertise in hiring within a variety of organizational contexts (Marshall, 1996). Potential subjects invited to participate in a confidential interview about their use of SNSs during the hiring process. Of 80 invitations, 19 hiring professionals agreed to be interviewed (24% response rate).
A majority of interviewees (n = 11) were from Fortune 1000 companies. Seven worked for public organizations, nine for private firms, and three for nonprofits or government agencies. The largest sector represented was services (n = 11). A majority (n = 14) were employed by the organization for which they evaluate job candidates; the rest evaluated candidates for client organizations. Eight participants were male; 11 were female. Age and professional tenure varied, with nearly half of the participants aged 36 to 45 and an average tenure of 8.68 years.

A semistructured interview protocol was used to elicit data about perceptions and use of SNSs during the hiring process via phone (Holt, 2010). Most participants (14 of 19) permitted the interview to be recorded. Once an introductory script was read, the interview followed a semistructured interview protocol (Kvale, 1996). Participants were asked to describe their hiring process and if/when SNSs were used. They were then prompted to explain how they used SNSs and how information from SNSs was perceived and used (or not). During and following each interview, extensive notes and reflections were compiled. For interviews that were recorded, transcripts were created, edited for clarity and anonymized. The edited transcripts were then combined with the interview notes to create comprehensive interview summaries. The interviews averaged 35 minutes and generated a total of 149 pages of double-spaced text for analysis.

Data Analysis

Interview data was analyzed with methods based on Strauss and Corbin’s (1998) guidelines. Grounded theory methodology is increasingly used, and debated, in studies of information systems (Urquhart, 2001). It involves an intensely data-driven process undertaken in the pursuit of theoretical findings (Strauss & Corbin, 1998). Strauss and Corbin (1998) indicate that their guidance for qualitative data analysis can be useful for a variety of research activities and can readily be adapted to answering specific questions. A strict interpretation of grounded theory suggests that theoretical sampling is a key component of any true application of the methodology (e.g., Morse, 2007). By this interpretation, the methods used in this study may not strictly be considered grounded theory, though the associated guidelines and techniques for cyclical coding provided the methodological foundation for this study.

Following Strauss and Corbin (1998), three cycles of coding were conducted: (1) open; (2) axial; and (3) selective. Open coding involved repeatedly reading the transcripts and notes to identify relevant passages and themes. In this initial process, the researchers performed open coding by identifying and taking detailed notes on passages relevant to the perception of the quality of the information in SNSs.

The second round of analysis involved axial coding (Strauss & Corbin, 1998) in an effort to capture the reoccurring perceptions of SNS IQ. For each of the passages, two researchers coded the dimensions of IQ (accessibility, contextual, intrinsic, or representational) being referenced and noted the relevant indicators. Passages were coded independently by both researchers and then discussed to come to an agreement as to which dimension and indicator(s) of IQ were exhibited, leading to full consensus between the researchers across all coded passages. Table 1 shows what indicators were used during the coding process and representative passages. The passages for each dimension were analyzed, and across and within participants, poles emerged, revealing tensions within three of the dimensions of IQ. Too few comments on the representational dimension of IQ prohibited its meaningful coding, so it was excluded.

For selective coding, passages were arranged into conceptually ordered descriptive matrices (Miles & Huberman, 1994). These tables were then used to cluster and partition the data in order to identify themes and meaningful quotes. Further analysis of the poles and tensions was conducted to identify affordances and high-level goals for each pole, which led to the identification of three types of contradictions within the dimensions of IQ—complementary, mutually implicating, and polarizing.

Finally, to determine if any findings were associated with participant characteristics, a matrix was constructed in which participants were classified (Leonardi, Treem, & Jackson, 2010) based on: gender,
<table>
<thead>
<tr>
<th>Accessibility</th>
<th>Open Pole</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>Open Pole</td>
<td>“I sourced a configuration management engineer directly from Facebook... it is successful... I know what’s out there, I know what the capabilities are and it’s free so it’s pretty fun and easy.”</td>
</tr>
<tr>
<td>Restricted Pole</td>
<td>“[Company X] policy is not to use the Internet to find out information like what pictures are out there that might show him in a compromising position. I do not actively go out there searching.”</td>
<td></td>
</tr>
<tr>
<td>Contextual</td>
<td>Pertinent Pole</td>
<td>“We have the LinkedIn information prior to having seen a resume. So if we are contacted by someone we do not know, we use their LinkedIn profile, and we use that as a gauge line to see if they are qualified.”</td>
</tr>
<tr>
<td>Contextual</td>
<td>Pertinent Pole</td>
<td>“Sometimes, though I have joined some of those groups and I don’t find them useful to me so. I used to look at that but I guess I haven’t been quite as successful with those groups so I don’t look at that too heavily...”</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>Reliable Pole</td>
<td>“If a person is putting up a LinkedIn site, they are putting up that information about them, no one else is. It’s young, accomplished professionals out there that want to keep a good network.”</td>
</tr>
<tr>
<td>Unsuitable Pole</td>
<td>Reliable Pole</td>
<td>“If a person is putting up a LinkedIn site, they are putting up that information about them, no one else is. It’s young, accomplished professionals out there that want to keep a good network.”</td>
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Table 1  Continued

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Examples</th>
</tr>
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<tbody>
<tr>
<td><strong>Questionable Pole</strong></td>
<td>• Doubted the credibility of the information</td>
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<td></td>
<td>• Nature of the information lead it to be considered ambiguous</td>
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<td></td>
<td>“To be honest, me personally I don’t read [LinkedIn recommendations] all that much . . . I don’t think anyone would have someone put a negative reference on their site . . . it is not going to get to the heart or the skill set of the individual . . .”</td>
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Table 2  Information Quality and Core Contradictions

<table>
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<tr>
<th>Information Quality</th>
<th>Dialectic Poles that Emerged From Axial Coding</th>
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<tbody>
<tr>
<td>Accessibility</td>
<td>Open ↔ Restricted</td>
</tr>
<tr>
<td>Contextual</td>
<td>Pertinent ↔ Unsuitable</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>Veritable ↔ Questionable</td>
</tr>
<tr>
<td>Representational</td>
<td>Not present</td>
</tr>
</tbody>
</table>

organization size, and whether the participant was employed by the organization for which they evaluate candidates. Using the matrix, participants were then clustered by each characteristic. This method of comparison allowed the researchers to see if participants’ perceptions of IQ were associated with particular characteristics (Miles & Huberman, 1994). Two researchers each conducted this procedure and both arrived at the conclusion that no profile of characteristics was associated with any of the specific findings.

Findings

Analysis of the data revealed a number of poles and tensions associated with the IQ of SNSs (Table 2). These tensions arose out of the juxtaposition of the information available within SNSs and a determination of how that information aligns with existing objectives, beliefs, procedures, and policies in the hiring process.

In this section, findings associated with tensions in each dimension of IQ are reported. For each dimension, the main insights of the data analysis are summarized in Tables 3, 4, and 5, which show: the two poles of the IQ dialectic; the main characterizing contradictions; the set of information-related affordances of SNSs; the goal-oriented action that guided the appropriations; and the complementary, mutual implicating, and polarizing relations of each contradiction.

Accessibility IQ

Accessibility is characterized by a tension between the poles of open and restricted, which was noted by 84.2% of participants (16 of 19). As shown in Table 3, participants’ perspectives revealed tensions surrounding the accessibility of information.
<table>
<thead>
<tr>
<th>SNS Affordances</th>
<th>Accessibility Pole: Open</th>
<th>Accessibility Pole: Restricted</th>
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<tbody>
<tr>
<td>• Search for information about a candidate using keywords and other criteria</td>
<td>• Focus on not violating policies and parameters that prohibit access to “unofficial” information.</td>
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<tr>
<td>• Filter search results to screen for specific job qualifications</td>
<td>• Follow established procedures</td>
<td></td>
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<tr>
<td>• View personal information about the candidate</td>
<td>• Avoid sources of potentially “private” information</td>
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<tr>
<td>• Obtain potentially privileged information about candidates that may not otherwise be available</td>
<td>• Save time and effort by not going through large amounts of information online</td>
<td></td>
</tr>
<tr>
<td>• Locate qualified candidates, regional candidates, and specialized candidates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Connect with candidates directly or through utilizing a network of contacts</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Goal Orientation</th>
<th>Utilization of all potentially available information available during the hiring process</th>
<th>Adherence to established procedures associated with information utilization</th>
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</thead>
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<tr>
<th>Dialectics of Information Quality</th>
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<tbody>
<tr>
<td>• Complementary: Having access to new, additional sources of information can be beneficial if users first receive training on how to best access it.</td>
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<tr>
<td>• Mutually Implicating: While access allows for the ability to retrieve large amounts of additional information on candidates, this additional information also needs to be managed.</td>
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<tr>
<td>• Polarizing: SNSs provide access to publically-available information that recruiters would like to use, but recruiters accessing this information has led to the development of new policies to restrict its use.</td>
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**Open Pole**

Hiring decisions are inherently information-intense decision making processes in which the need for information can never be fully satiated. The open pole (12 of 16 who discussed accessibility IQ, 75%) reflected this perspective, arguing that the open nature of SNSs afforded professionals the opportunity to access additional information to facilitate their search for organizational talent. Noteworthy for the open perspective was that the information within SNSs was not seen to be overly exclusive or privileged. Rather, it was about ease of access. From the perspective of this pole, participants portrayed SNSs as an information marketplace, where professionals, as information seekers, could easily access information to facilitate achieving their objectives. The open nature of SNSs coupled with their technological capabilities (e.g., persistent, searchable) produced affordances
### Table 4  Contextual: Pertinent ↔ Unsuitable

<table>
<thead>
<tr>
<th>Contextual Pole: Pertinent</th>
<th>Contextual Pole: Unsuitable</th>
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<tbody>
<tr>
<td><strong>SNS Affordances</strong></td>
<td></td>
</tr>
<tr>
<td>• Seek any, and all, information—even if it is personal—to best form impressions of the candidates</td>
<td>• Avoid personal/social information, as it provides no indication of how one will perform on the job</td>
</tr>
<tr>
<td>• Form a more complete and comprehensive understanding of a candidate from additional details</td>
<td>• Avoid information details that are spotty and incomplete</td>
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<tr>
<td>• Create value by obtaining useful information during the hiring process</td>
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<tr>
<td><strong>Goal Orientation</strong></td>
<td></td>
</tr>
<tr>
<td>Consideration of all information as relevant to the hiring process</td>
<td>Focus on the distinction between social and professional information in the hiring process</td>
</tr>
<tr>
<td><strong>Dialectics of Information Quality</strong></td>
<td></td>
</tr>
<tr>
<td>• Complementary: Information provided by individuals on SNSs may not be professional in nature, but it provides an opportunity for a more comprehensive understanding of the candidate as a person.</td>
<td></td>
</tr>
<tr>
<td>• Mutually Implicating: SNSs were seen to provide social information not relevant to how well a candidate could do a job. The use of social information was seen as a way to gain a better understanding of the complete person, and thus make a better hire.</td>
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<tr>
<td>• Polarizing: Relying too much on professionally oriented information or too much on social information can create an ill-informed impression of a candidate.</td>
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for the professionals aimed at reducing search costs, including the ability to search, filter, and view comprehensive information in spite of the candidates specific intentions, as explained by this Corporate Recruiter:

> I would definitely say what their interests are, where they went to school, how well they did in school, what extracurricular activities they were involved in, what groups they belong to . . . if there is something you don’t want people to see, I would suggest you don’t put it up there.

It was not just isolated to information about candidates, but also the connections within SNSs served as a highly accessible source of information to be used to locate candidates, as illustrated in an example provided by this Recruiter:

> I want to identify those good candidates, so I would go onto LinkedIn and join a couple of tax groups. Then I communicate with those individuals in those groups and potentially identify a good candidate that I could talk to about the opportunity; and if those people are not the right candidates, then maybe I can get a referral from them.
Table 5 Intrinsic: Reliable ↔ Questionable

<table>
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<tr>
<th>SNS Affordances</th>
<th>Intrinsic Pole: Reliable</th>
<th>Intrinsic Pole: Questionable</th>
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<tbody>
<tr>
<td>• Utilize an additional source of candidate-supplied information</td>
<td>• Avoid ambiguous information</td>
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<tr>
<td>• Directly observe behavior and communication disclosed by the candidate</td>
<td>• Save time by not considering unreliable information</td>
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Goal Orientation

<table>
<thead>
<tr>
<th>Goal Orientation</th>
<th>Seek only trusted information to inform hiring</th>
<th>Minimize additional uncertainty in a hiring process</th>
</tr>
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Dialectics of Information Quality

<table>
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<tr>
<th>Dialectics of Information Quality</th>
<th>Complementary: Candidate-supplied information in SNSs, by its nature, was deemed important by the candidate. Thus, information in SNSs can provide both a statement and the candidate’s evaluation of the information.</th>
<th>Mutually Implicating: Information has been directly shared by the candidates; this candidate provided information in an attempt to manage the impressions held by other users.</th>
<th>Polarizing: In SNSs, candidates post information about themselves, so it should be credible; but this source may still contain unreliable or dubious information.</th>
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Restricted Pole

Traditionally, HR systems, and their accompanying policies and procedures, have been painstakingly designed to reflect the unique needs of the organization and to facilitate efficient, effective, and compliant searches for talent (Becker, Huselid, Pickus, & Spratt, 1997). The restricted pole (10 of 16 who discussed accessibility IQ, 62.5%) reflected this perspective. Participants indicated that in spite of being technologically accessible, access to SNSs was not permitted due to existing organizational practices and policies, as exemplified by this Account Acquisition Specialist:

[Company X’s] policy is not to use the Internet to find out information like what pictures are out there that might show [the candidate] in a compromising position. I do not actively go out there searching.

Noteworthy for the restricted pole was that prohibiting the use of SNSs through formal organizational policy did not mean professionals never encountered SNS information. Rather that when they encountered it, professionals enacted their own restrictions by excluding such information from their decisions, as explained by this Recruiting Program Manager:

Now occasionally that doesn’t mean people from [Organization X] will say “oh I saw them on Facebook,” or some unofficial commentary on the funny picture they posted or something like
that. Sometimes you do wonder if [candidates] are in the job search process and they post a party picture on certain websites—there could be a comment on that. That is not something officially as a recruiter that I look at upon submission.

**Dialectics of the Two Poles**

Researchers have proposed that accessibility of information is often the primary determinant of information use (O’Reilly, 1982), as well as SNSs usage (Urista, Dong, & Day, 2009). As summarized in Table 3, the accessibility dimension of IQ was defined by contradictions between open and restricted access. While SNSs are designed to minimize restrictions and maximize access to information, professionals (or their organizations) put obstructions in place to restrict access. In this case, one pole prevented the realization of benefits afforded by the other. Ironically, organizational policies aimed at fostering efficiency and effectiveness constrained hiring professionals from accessing information that itself had the potential to reduce poor hiring decisions and save organizational resources.

Perspectives from both poles acknowledged that movement towards the other pole over time was going to be likely in an attempt to find a balance and best strategic use for SNS information. From the restricted pole, there was a realization that SNSs could be used as a fallback source when established methods of obtaining information fail to deliver. While from the open pole, it was acknowledged that the potential of having open access to potentially unlimited amounts of information is not necessarily functional or desirable, creating a need for procedures. In particular, procedures to guide professionals in how they should best access the information as a strategic resource and avoid information overload are needed.

**Contextual IQ**

*Contextual* is characterized by a tension between the poles of pertinent and unsuitable, which was noted by 84.2% of participants (16 of 19). As shown in Table 4, participants’ perspectives revealed tensions surrounding the context of the information.

**Pertinent Pole**

When the quality of information is assessed, relevance is considered appropriate to the task at hand. For the participants, the task was filling open positions with qualified candidates, and they noted that SNSs contained information relevant to this task. The *pertinent* pole (12 of 16 who discussed contextual IQ, 75%) reflected this perspective, arguing that SNSs were more than just access to information, but the information was relevant to the task of forming a more complete understanding of candidates. This comprehensive view was seen as a valuable input to the hiring process. Information was seen as providing insight into the suitability of a candidate, which was seen to be useful in the initial screening of candidates, as stated by a Human Resources Generalist:

> If we see something in their profile that we don’t think is appropriate, then we just don’t even bother asking them for a resume.

While general relevance mattered, participants indicated that the additional details SNS information provides were especially valuable for evaluating a candidate, as summarized by a Recruiting Manager:

> [Detail] is definitely more helpful, the more detail the better. The more detail the better because I tend to decide more quickly with more detail if someone is a match to one of our positions.
Finally, SNS information was seen as a relevant element of finalizing due diligence on a candidate, as explained by a Sales and Marketing Placement Manager:

The more information we can find on a candidate the better. I think one reason to visit a personal blog or [SNS] is for background checks and I know my clients will conduct a very thorough background check. I would prefer to catch it before my client does.

While a variety of SNSs were noted as being germane, perhaps unsurprisingly, LinkedIn, whose design and focus is explicitly aligned with professional presentations, was seen to be an especially pertinent source of value-added information, as expressed by a Senior Recruiter:

LinkedIn was kind of the first social/professional networking site that has been used for recruiting, and it has become more standardized now and is part of the process at most companies because it has been around for a while. People have seen success from it... in terms of effort, time, money and good quality of candidates.

In fact, information from LinkedIn was seen to be so useful that it was credited as being the driving factor behind hires, as explained by a Senior Search Consultant:

[LinkedIn] has been phenomenal. I made a placement last year that was solely based on LinkedIn. I didn’t know about [the candidate]... I had just done a blind search, she was in profile from what I had seen, I called her and we built a really nice relationship. ... three weeks later she was accepting the position.

Unsuitable Pole
At the same time, participants were acutely aware that more information is not always better information. Their comments generally reflected efficient decision makers’ desire to avoid information of little consequence to their decision processes. The unsuitable pole (11 of 16 who discussed contextual IQ, 68.8%) reflected this perspective. Participants in this pole made clear distinctions between professional and personal information, even when there were no technologically created or enforced boundaries that separated them. Central to this position was the belief that SNS information was often irrelevant to assessing candidates’ ability to perform on the job. What candidates did outside of business hours was not of interest; only work-related performance mattered, a perspective reflected in these comments by a Department Director:

We care about understanding how well candidates will do on the job; their personal life is their personal life... As a matter of practice and process we do not go into a candidate’s personal website profile, any Facebooks or Myspaces. We don’t go into any of that stuff. We are interested more in their academic stuff.

The approach of focusing only on professional and job-related information was shared by other participants, such as the Recruiting Manager below; with the caveat that some information about off-the-job activities mattered:
We don’t really delve into our candidate’s personal life . . . Our objective is to see how well they do on the job. We don’t really care what they do off the job—as long as it’s not criminal.

In contrast to professionally-oriented SNSs, some SNSs (primarily Facebook) were perceived as containing purely social information, and thus assumed to not contain useful information for the hiring process. While Facebook has more than six times the number of members as LinkedIn, respondents who perceived it as a social SNS saw its information as unsuitable, as expressed by this Director:

I do not see those [Facebook or Myspace] as being employment sites. I don’t see those sites as being business sites, such as LinkedIn, which is driven towards careers and business. And so for me, those social sites are just that. I do not, nor do I have any of my people, out looking for candidates or reading materials off of social sites or evaluate candidates based on social sites—we do not do that.

Finally, while acknowledging SNS information might be useful to find someone, it was perceived to be of limited use for understanding candidates because it was considered incomplete, as asserted by a Director of Talent Acquisitions:

So the information out on LinkedIn is useful information to connect, but I don’t necessarily use that information to judge the total picture of an individual, because even for myself I don’t have my entire background out on LinkedIn. I take it for it is worth.

_Dialectics of the Two Poles_

The professionals shared the desire to use appropriate information to assess candidates, recognizing this aspect of IQ. However, a tension emerged between the pertinent and unsuitable poles. Participants wanted to obtain a complete picture of candidates, but differed on what the definition of complete is and how the complete picture should be achieved, creating a tension within contextual IQ. The pertinent pole was based on the observation that even when SNS information is not explicitly about individuals’ professional activities and performance, it provides an opportunity to develop a more comprehensive understanding of the candidate as a person. This perception reflects the reality that while there may be socially constructed boundaries, people exist as distinct individuals across their personal and professional lives. As such, SNS information was viewed as pertinent because it would afford better decisions regarding holistic fit between the individual, the position, and the organization.

However, while SNS information can provide additional detail, the information within SNSs was seen as being in some ways unsuitable, irrelevant, and incomplete. As such, rather than facilitating a more comprehensive picture, it introduces the potential to create a distorted view of a candidate. Participants discussing aspects of IQ found to be associated with the unsuitable pole were more sensitive to the boundaries and differences between professional and social information. While acknowledging SNSs contained relevant professional information, the presence of the personal, unsuitable information negatively affected perceived contextual quality of SNS information. Yet professionals varied in how they responded to the simultaneous presence of both types of information. Some respondents took an expansive approach, asserting that all information about a candidate was potentially relevant to hiring decisions, seemingly ignoring the existence of the unsuitable pole of contextual IQ. At the other extreme, there were the respondents for whom the existence of the unsuitable pole implied that SNSs should be completely ignored as information sources due to low contextual IQ. Under this approach SNSs were
avoided because it was believed that focusing on information sources unambiguously appropriate to the task at hand led to better decisions and outcomes. Still other participants took more nuanced approaches, selecting either particular SNSs or types of SNS information that they saw as relevant and appropriate for hiring decisions and ignoring other SNSs. Regardless of the approach, the evidence demonstrated the tension between pertinent and unsuitable to be a dynamic of contextual IQ that hiring professionals must manage.

**Intrinsic IQ**  
*Intrinsic IQ* is characterized by a tension between the poles of reliable and questionable. This aspect of SNS information was discussed by 68.4% of participants (13 of 19). As shown in Table 5, participants’ comments and arguments revealed tensions inherent in their understandings of the basic nature and characteristics of SNS information.

**Reliable**  
The *reliable* pole (11 of 13 who discussed intrinsic IQ, 84.6%) characterized SNS information as credible. Respondents commenting on the reliable pole also noted that SNS information was reliable and credible, partially due to the fact that it was provided by the candidates themselves. Underlying the association of self-provided information with reliability appeared to be the assumption that individuals value their professional networks and are aware of how the intrinsic quality of the information they provide affects those networks, as explained by this Senior Search Consultant:  

> I find [LinkedIn] phenomenal. It’s a great professional networking site. I think over time it has deemed some really good credibility as a really useful site. If a person is putting up a LinkedIn site, they are putting up that information about them, no one else is. It’s young, accomplished professionals out there that want to keep a good network . . .

This quote also illustrates a perspective shared among participants, suggesting that reliability was associated with particular SNSs. For example, LinkedIn was seen as a credible source of candidate-supplied information, as this participant notably referred to it as a “professional networking site” and not as a “social networking site.”

One possible reason these interview respondents saw candidate-supplied information as objective is that they were focused factual information (e.g., name, location, years of experience) that is less open to interpretation. As noted by one recruiting manager, in spite of its mundane nature, this type of information can be important for developing a better understanding of the candidate and how they might fit the opening:

> I am looking for a steady job history. Maybe someone who works for direct competitors, consulting firms, maybe people’s consulting experience. People that have maybe the technology skills that I am looking for. Maybe people who have the industry experience . . .

**Questionable**  
The *questionable* pole (5 of 13 who discussed intrinsic IQ, 38.5%) reflected reservations about the intrinsic quality of SNS information. For this reason, information contained within SNSs was seen to require additional verification, as summarized by a Senior Search Consultant:
I take it at face value - it’s just there on the Internet. But now I have to go and take it into a deeper dive when I talk to that person.

In contrast to claims about reliability, most of which emphasized a connection between credibility and self-provided information, interview respondents commenting on questionability generally doubted the quality of indirect types of SNS information, such as recommendations, group memberships, or a candidate’s professional network. Somewhat surprisingly, given the important role of traditional recommendations in hiring processes, LinkedIn recommendations that allow third parties to provide information about the candidate were generally dismissed.

...I don’t read [LinkedIn recommendations] all that much. It’s a reference and I don’t think anyone would have someone put a negative reference on their site. So all that information is going to be blowing you away, but it is not going to get to the heart or the skill set of the individual...

One explanation for the association of questionable intrinsic quality and indirect SNS information, reflected in the above comments from a Director of Talent Acquisition, was that unlike traditional recommendations, LinkedIn recommendations are visible to both the candidate and their larger network. This creates incentive for both candidates and their recommenders to avoid negative assessments and overemphasize positive points, creating severe biases.

While self-provided information can be readily verified by comparison with other sources already present in a hiring context, such as resumes and interviews, this is not the case with indirect SNS information. As a result, another issue affecting assessments of intrinsic IQ, as explained by the owner of a recruiting firm, was the difficulty in verifying the identity and credentials of recommendation authors.

I don’t put a ton of weight on their recommendations because anyone can write them a recommendation...I know recommendations are nice, but you can always get your friend to write you a recommendation, so I don’t put a lot of weight on those.

Dialectics of the Two Poles
Intrinsic IQ emphasizes the basic nature of SNS information in the hiring context as subject to a tension between reliable and questionable poles. The reliable pole highlighted ways SNS information can be credible, because it is often factual information that is provided by the candidates themselves. This led some hiring professionals to accept as credible some SNS information. However, the same features of SNS information underlined the questionable pole. Specifically, the visibility that led some participants to conclude that self-provided SNS information is likely to be reliable also raises significant questions about the intrinsic quality of third party recommendations and referrals (e.g., LinkedIn recommendations). Although none of the participants explicitly claimed that candidates falsify information they share on SNSs, the possibility that information provided by third parties could be manipulated was often referred to as an explanation for doubts and concerns about SNS IQ. Likewise, while no specific instances of implicit verification were described, the public, connected nature of SNSs was often assumed to be a basis for social verification and control of information. Openness and visibility, two central features of SNSs, gave rise to the simultaneous presence of reliable and questionable poles, ultimately requiring the hiring professional to engage the intrinsic IQ dialectic as they seek to understand and work with SNS information.
Representational IQ

Finally, among the participants interviewed, there were few participants who even commented on representational IQ, which refers to aspects of readability, format, and compatibility (Lee et al., 2002). On one hand, this could have been the result of particularities of the interview protocol or sample. However, it may also have been that lack of attention to representational IQ and the absence of an explicitly referenced dialectic tension, was a result of the SNS developers maximizing usability and minimizing user costs. Traditional IQ studies are primarily focused on organization-based systems and reports, where information is presented in order to meet the needs of specific internal decision makers. For example, HR information systems (HRIS) are created to specifically support HR managers and hiring managers. In contrast, SNSs are designed for a broad user basis, in which users’ experience, ability, and needs vary significantly. Furthermore, while organizationally embedded systems typically are the sole source of information, SNSs exist within a competitive environment where users, both candidates and professionals, will only use the system if information representation is consistent, as this improves usability and lowers the costs of use relative to the benefits. Thus, it may be that, somewhat ironically, the absence of a focus on the hiring process and professionals’ specific needs, coupled with alternative goals of attracting a wide user population in a competitive environment, led SNSs to maintain an adequate, essentially unnoticed, level of representational quality.

Discussion and Implications

The quality of information directly affects how it is used by a decision maker and decision outcomes (O’Reilly, 1982). However, quality is not an outcome. The findings of this study suggest not just that SNSs are a technological innovation hiring professionals must work to understand, but that the nature of the perceptions of the IQ of SNSs among hiring professionals are rife with contradictions. Almost all of the professionals interviewed (16 of 19) identified information-based affordances of SNSs in the hiring process, and it is these affordances that gave rise to identified tensions within the dimensions of IQ. While one might expect from existing research and commentary that the emergence of SNSs would directly affect hiring processes, this study suggests that the impact will be more complicated. Unlike previous research that directly associated technological characteristics of information sources with IQ (Lee et al., 2002; Stvilia et al., 2007), the findings presented highlight the dialectic tensions inherent in the dimensions of IQ. This implies that assessments of IQ are not directly derived from features of the task, technology, and information. Rather IQ judgments arise from the ways users engage and resolve the tensions presented to them in a particular socio-technical situation.

The tension within accessibility IQ, between poles of open and restricted, is likely to be a site of change in the near term. The restricted pole is characterized by the presence of organization policies that focused on controlling the use of SNS information. In contrast, the open pole was exemplified by the absence of policies allowing, encouraging, or discouraging the use of SNS information in the hiring process. The identification of this imbalance with respect to organizational policy was a somewhat surprising finding given that hiring processes, in particular those associated with obtaining information about candidates, have traditionally been heavily defined, both positively and negatively, by policies and procedures aimed at compliance with internal guidelines and external laws. One potential explanation for this policy imbalance is that SNSs are still considered to be an emerging tool, and hiring professionals are still trying to make sense of this equivocal technology, and thus far, organizations have focused first on avoiding risk. If this is the case, applying existing organizational policies to SNSs information would be assumed to be problematic, as SNSs seem to be quite different from the information sources organizations have traditionally used (e.g., resume, interview) with respect to accessibility. For example,
the accessibility affordances of SNSs could result in hiring professionals having access to information related to an applicant’s protected class status, creating the risk of a violation of equal opportunity employment laws. The findings of this study indicate that at least some organizations have begun to recognize the risks of openness and the need for restrictions. However, the dialectic model of SNS IQ suggests that, at least among the hiring professionals in this study, the positive aspects of restriction and the organizational benefits of openness are less likely to have been incorporated into organizational policies.

Findings related to contextual IQ provide insight into a phenomenon currently emerging within the SNS literature. Prior research has found that individuals creating profiles in SNSs do not necessarily want their information to be viewed by all users (Bateman et al., 2011). This is in part due to individuals’ desire to live segmented lives, often sharing different information depending on the audience (Havern, 2004; Walther, 2007). For example, users have a conscious desire to maintain contextual boundaries on SNSs in order to keep information associated with their professional and personal lives separate. Maintaining such contextual boundaries is only possible as long as audiences are separate and there exists little opportunity for interaction among the audiences (Goffman, 1959). However, it has been argued that SNSs have removed many of the barriers between the audiences, making it increasingly difficult for users to maintain these separations. This merging of multiple distinct audiences into a singular audience has been termed “context collapse” (Vitak, Lampe, Gray, & Ellison, 2012). Perhaps the most salient tension in the data, between the poles of pertinent and unsuitable within contextual IQ, reflects this merging of distinct audiences. Although none of the SNS sites mentioned by respondents imposed hard technological barriers between types of information, the dialectic model of SNS IQ revealed that some hiring personnel constructed psychological boundaries, separating contextually relevant (i.e., professional) information from that which was not (i.e., personal). This reminds us that SNS technologies alone do not create context collapse; rather, while the technology may make it possible, context collapse is a result of practices enacted by the information users. Treating context collapse as a technologically determined (Vitak et al., 2012) outcome of SNS is, at best, problematic. Instead, context collapse is better seen as practice change, for which a dialectic lens is useful for identifying the tensions that are engaged as individuals and organization negotiate their perceptions, beliefs, and actions. Additional empirical studies of how and when people perceive and constitute boundaries, how they assess IQ in the face of seemingly contradictory features and dimensions, and how these processes are affected by technology features, organizational policies, and professional norms are necessary to provide reasonable guidelines for hiring professionals, managers, and system designers struggling to work in the new, socially networked world.

The tensions arose across the participants’ assessments of SNS IQ, which were likely impacted by their experiences, practices, preferences, beliefs, task objectives, organizational goals, and professional standards. While the participants did not explicitly recognize the dialectic, the findings suggest that one strategy for managing tensions would be to “eliminate” the tension by asserting one pole is correct or dominant. This approach is consistent with previous work using a dialectic perspective, which found that some respond to contradictions in simple ways, such as anchoring on one pole or cyclically altering attention to various poles (Tracy, 2004). While present, this elimination approach was not uniformly seen in the data, with 57.9% of participants (11 of 19) explicitly referencing both poles in their assessment of at least one IQ dimension. Instead, these professionals seemed to make sense of IQ by using SNS information in an attempt to resolve the inherent tension between the opposing poles. Yet, this attempt was not necessarily simply the result of choice. Resolution of the tension within accessibility IQ was guided, at least in part, by organization policy that accounted for the needs of the firm, the hiring personnel, and the candidates. Yet contextual IQ, descriptions in the data included reference to less formal guides, such as organizational practices and professional norms. This suggests
that balancing IQ tensions related to SNS information is a negotiation, and it is from these negotiations that the consequences of SNSs for the hiring process will emerge. As such, the dialectic tensions and methodology of this paper suggest that research that adopts a straightforward technology adoption perspective of SNSs in hiring are likely to understate the challenges and issues associated with use of SNSs in this context.

Finally, this study contributes to the development of methods for engaging in a dialectic analysis of IQ in hiring context and SNSs. Dialectic tensions promote mindful adaptation of technologies and capabilities, as without the tension there would be a tendency for individuals or organization to mindlessly adopt information sources in ways that may not be beneficial (Butler & Gray, 2006). As such, future work should examine whether, and how, individuals and organizations engage (or do not engage) the tensions identified in this study and how this engagement (or lack thereof) affects the risks they face and benefits they are able to derive from use of SNSs in the hiring context.

**Conclusion**

Hiring professionals have long been tasked with strategically using organization-based systems, and these types of systems have served as the primary foundation and focus of the IQ literature. However, SNSs represent a new class of systems, as they are not owned, operated, or controlled by the organizations that employ the users assessing the quality of information provided by these systems. This work paves the path for the examination of IQ within systems when they are being used to achieve organizational objectives yet no official relationship (i.e., no ownership or contract) with the source exists. As technology continues to evolve, in particular the exponential growth of information available on the internet, questions regarding the assessment of IQ from nonmanaged, external sources are likely to be of continued importance.

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**Notes**

1 In this paper “hiring professionals” is used to refer to individuals, both internal and external to an organization, that are charged with the responsibility of identifying and selecting candidates for open employment positions.
5 SNS information can be completely public, semi-public, and private depending on user’s privacy settings, which research has shown is underutilized (Boyd, 2008) and users struggle to manage (Lipford, Besmer, & Watson, 2008).
6 Subject to the settings of a user profile, access to information posted by, and about, an individual on a SNS can range from complete to limited.
Participants explicitly referencing both poles within a particular IQ dimension were: Accessibility IQ, 42.1% of participants (8 of 9); Contextual IQ, 36.8% of participants (7 of 19); Intrinsic IQ, 15/8% of participant (3 of 19).

References


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