Need-finding Report

Relevant to millions of unemployed persons is trustworthy, up-to-date job-search information that users can view at a glance to obtain relevant updates. I define relevant updates as job postings matching the user's search terms (i.e., search results do not display jobs that do not match the user's skill sets and interests) and that link to and describe available positions for which the user has not yet applied. As a project for a Human-Computer Interaction course offered by coursera.org in the fall of 2012, I conducted user research to identify user needs for an online job-search tool that would allow users to:

- Identify new job opportunities at a glance
- Filter job opportunities by posting date, job title, requisition number, employer, location, domain knowledge, soft skills, and technical skills
- Track the status of job applied for
- Store postings for future reference or action

Method

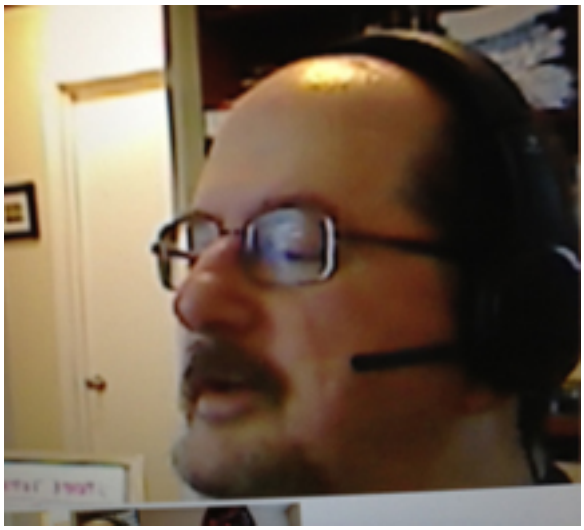
Interviews with and observations of people who use or have used job-search websites and applications provide information about users' needs and goals. They show how people use job-search websites and applications, the difficulties or useful features users may encounter, and user preferences both for the kinds of information users are seeking and for the display of that information.
Brainstorming sessions with current and former job seekers identify or further refine needed information, information display, and tasks.
I recruited three users through a LinkedIn discussion group and at a Starbucks coffee shop.
I interviewed the three and observed two to understand and document their process for searching for employment on- and offline. I asked questions about offline job-search activities, such as attending networking events, to investigate user needs and goals for this aspect of job searching.

I also observed participants logging on to job-search websites, such as Monster.com, Dice.com, and Careerbuilder.com, and job-posting aggregators, such as Indeed.com. I asked participants to explain steps as they performed them and to describe any difficulties or useful features they encountered. During or after each interview I asked all three participants to brainstorm ideas about user needs and goals for a job-search user interface.

Observations

Ed G., a business analyst and SharePoint expert laid off in May 2012, begins his online job search at 8 a.m. daily. Ed's search process is as follows:

- From his desktop computer, checks email alerts for new job postings from job-search websites and job aggregators, such as the following:
  - Monster.com
  - Careerbuilder.com
  - Indeed.com
  - Dice.com
  - SimplyHired.com
- Checks corporate websites for new job postings.
- Clicks links that display job titles that appear relevant to his skill sets and interests



Ed G. conducts an online search for new job postings. He applies only if he's certain he has not already submitted an application.

Finding: Job Descriptions "Inaccurate"

Ed reads job descriptions closely to determine if his skill set matches job requirements. Ed notes that job

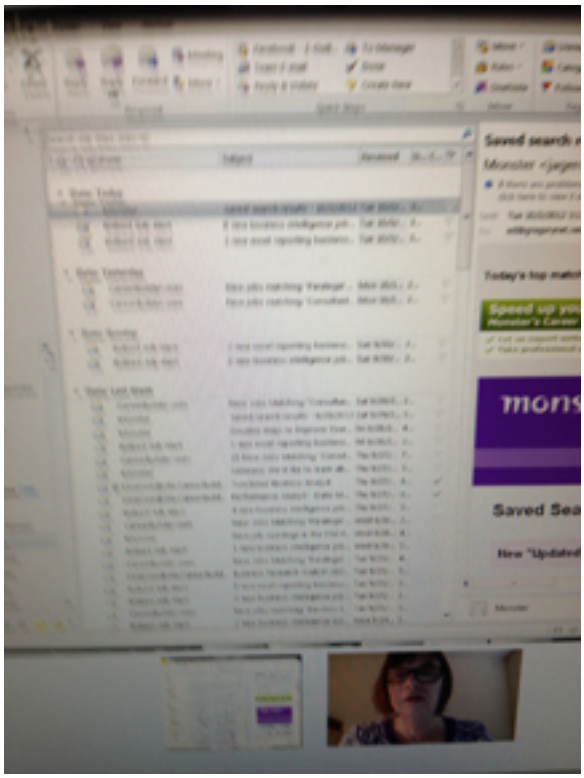
descriptions are often incomplete and inaccurate. He says that many job descriptions use inaccurate job titles, possibly because recruiters do not understand job requirements and differences between related jobs in the same field.

Finding: Essential Information "Buried"

He says that essential skills are buried beneath marketing information about the employer or are grouped with nonessential "nice to have" skills or knowledge areas. Technical skills are grouped with domain knowledge (e.g., financial services or healthcare) and personal traits (e.g., analytical ability or team-oriented), making it difficult and time-consuming (Ed says up to 10 minutes per job description) to determine if the position is a good match.

Finding: Use of Facebook Questioned

If Ed thinks the job description and his skill set match and the compensation offered (if displayed) meet his requirements, Ed writes a cover letter explaining his interest and qualifications, and submits an application according to the employer's



Ed clicks a link to a job he may be interested in.

Jr-Mid Level Business Analyst

About the Job

Jr-Mid Level Business Analyst

Day to Day Responsibilities for the role:
- Develop or maintain subject matter expertise for the Surety industry.
- Understanding business requirements and translating them into specific requirements
- Working with management to improve profitability, increase functionality and ease of use to attract additional revenue
- Identifies, analyzes, and documents business requirements and delivers work products throughout the product/project life cycle for our customers.
- Scope solutions for costs for both resource time and financial
- Having strong technical skills, business intelligence, and a full understanding of the needs of the customer
- Leading and participating on project and key initiative teams.
- Conduct program and product orientation meetings in conjunction with the sales managers.
- Develop custom report from Bond-Pro, ImageRight, and Data Warehouse
- Lead administrator for Bond Pro and ImageRight systems as it relates to maintaining business rules, work flows, document library and form library.
- Oversees flow of data between systems, including agency to carrier

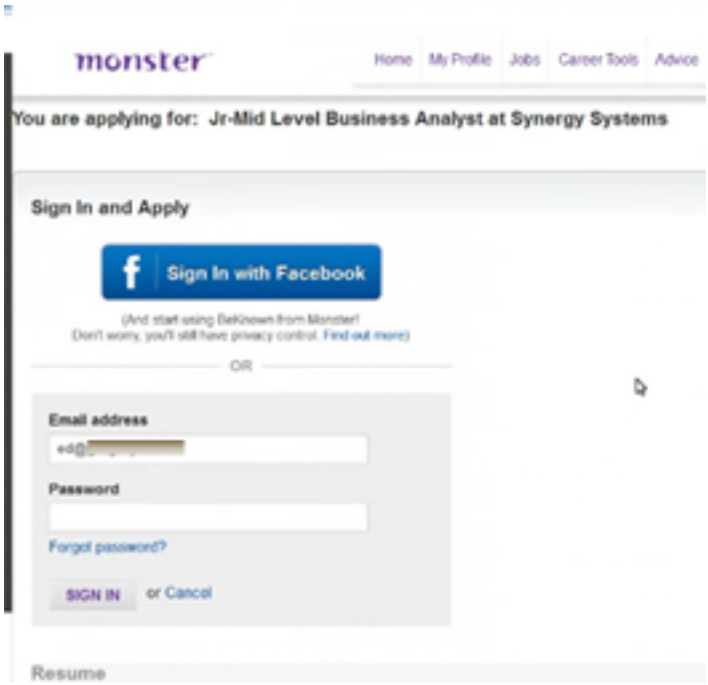
Required Skills:
- Strong writing and communication skills required. Strong knowledge of MS Word and MS Excel.
- Basic understanding of technical designs, workflow and specifications
- Strong financial background a plus (banking, financial services or construction)
- Significant analytical skills
- Exceptional organizational skills
- Demonstrated commitment to continuous quality improvement

Desired Skills:
- Three to five years of Surety or Property & Casualty Insurance experience. Underwriting or risk management exposure a plus.
- Experience with image system a plus.

Partial screen capture of a job description that Ed accessed through Monster.com.

requirements (e.g., attach resume, complete online application form).

Ed notes that he never uses Facebook widgets (as shown in the screen capture to the right) to sign in to a company website and apply for a job. Ed says he does not trust Facebook to keep his private information private, especially in a job-search setting.



Partial screen capture of Monster.com user interface for job application. Ed created his own job-tracking system in SharePoint. He uses this system, which he plans to market, to track by date and other parameters.

Srinivas Y., a QA Lead for a national department store chain, says that he no longer uses job-search websites, but instead works with his contracting agency, Performance Resources, Inc., to find work when his contract -- typically of about two and half years' duration -- ends. Srinivas says that he prefers contracting to regular full-time employment because it allows him to learn new jobs and add to his experience.

He says he prefers receiving emails from his contracting agency over job-search websites because the contracting agency knows his qualifications and only notifies him for positions that are a good match. They also understand differences between similarly titled jobs (e.g., "administrative lead," "development lead" and "product lead").

Srinivas Y. discusses his experiences with and preferences for job-search websites and applications.

Finding: Job Alerts "Irrelevant"

Srinivas said that his contracting agency has kept him continuously employed for five to six years. Before working with the agency, Srinivas says that he used his desktop computer to search for jobs online for up to five hours a day. He says that search results were often irrelevant and that he was annoyed by frequent alerts from Monster.com and other job-search websites because, they too, conveyed largely irrelevant information. He says that senders know alert content is irrelevant, but send alerts anyway in the hope that the recipient will share the information with

others who might be interested. He says the senders' other motivation may be contractual or to keep their brand before users.

Finding: Multiple Filters Needed for Faster Performance

Srinivas says that filters for full-time, part-time, and "W-2" work could only be used separately on the job sites he visited. The filters could not be used together; so separate searches were required for each employment category. This added time to his search. Srinivas says that allowing multiple filters in a single search would also result in faster server performance.

Srinivas says that he tracked his job applications by sending copies of email submissions to himself. Like Ed G., Srinivas was wary of submitting multiple applications to the same company, whether for the same or different jobs.

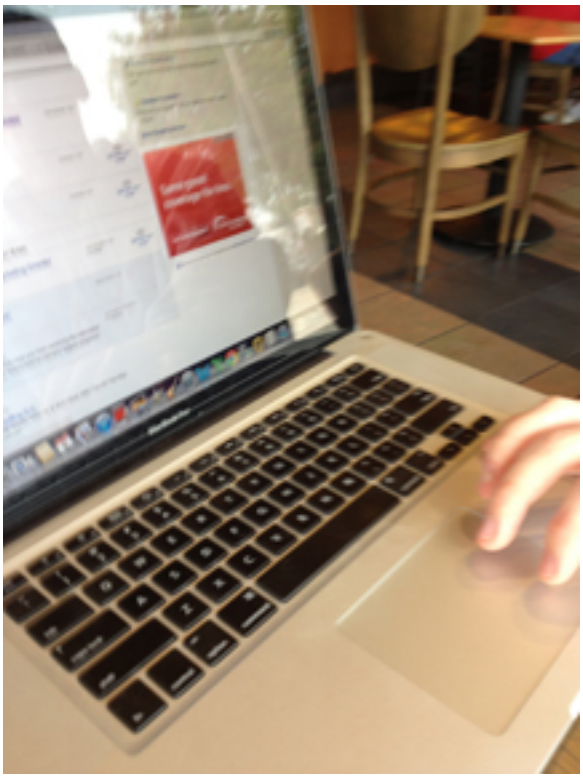
Alex F., a Google Certified Marketing consultant and owner of the science-based Internet marketing company, Funnel Science, says that he has not used job-search websites or applications since he transitioned from the Marine Corp. to the private sector eight years ago.

He says that online recruiters seldom use the correct job titles or keywords in job descriptions. The result is that search results are irrelevant. He says he did not and would not ever apply for a job online if he were required to submit his resume in a textbox that stripped out resume formatting. He says that doing so is a waste of time.

Alex F. walks through job-search steps online.

Alex says that such textboxes are ill-considered and indicate that the company seeking to fill the position is poorly managed. Recruiters and higher-ups misunderstand both job requirements and the key words and links that would work best to attract the most highly qualified job candidates.

He cites his own experience as an example. Although he hasn't looked for work in years, recruiters call him frequently to gauge his interest in mislabeled marketing positions. Recruiters look for a CMO (chief marketing officer, direct report to a company's CEO) when what they really want is a marketing specialist who works on commission. Alex says that job-search websites often list jobs that have already been filled or list jobs that never really existed. He names a well-known job-search website said to have engaged in this practice. He says that website owner lost significant market share as a result of this practice.



Alex visits a job-search web site that displays company profiles, a feature he likes.

User Needs & Goals

Brainstorming consisted of asking the three participants for their suggestions. On the subject of "mobile-first" user-interface design, I asked participants whether they would use or like to have this feature. One said yes, although he prefers using his desktop computer for job searches, owing to its large monitor. The other said he has not and would not use a mobile device for online job searches.

All three participants said that users need more and better filters to display job search results relevant to their needs. All three mentioned the need for more

accurate job titles and job descriptions and that all job listings be current and valid (i.e., no listings of fake jobs or jobs that have already been filled).

Other user needs and goals include:

- Remove jobs that the user has applied for from search display.
- Or display an alert that tells the user he or she has applied as well as the date of the application.
- Per Alex F., include user comments on the job description page to indicate the number of applicants and post-interview applicant assessments. (Note: Srinivas Y. says that user comments serve hirers, not job seekers. He says hiring companies use this information to weed out candidates they deem potentially risky for having frankly stated their views.)
- Per Ed G., display job requisition numbers so that applicants can avoid applying for the same job through multiple recruiters or avoid applying for different jobs with the same employer. Ed explains that multiple applications at the same time and with the same employer shows employers that you're desperate for work and may be applying for any job in the hope of landing any job. They also indicate that the job seeker is disorganized, and they make more work for hiring managers, who must sort through and assess applications.
- Per Alex F., use greater accuracy in key words and links for all job descriptions. Inaccurate key words and links may route the online application to the wrong place, or the application may never make it past automated reviews to actual human reviewers/hiring managers.
- Per Ed G., move job requirements to the top of the job description.
- Per Ed G., distinguish between must-have job requirements; desired job requirements, and nice-to have job requirements.
- Per Ed G., distinguish between technical requirements, domain knowledge, and soft skills.

- Per Ed G., clearly state essential requirements. If the applicant must have knowledge of and experience with a particular kind of software, for example, say so.