IOWA STATE UNIVERSITY **College of Engineering Honors Program**

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Variations in Resume Design

1. Objectives

Employers and applicants have been debating the topic of resumes for years. With the introduction of new resume design trends and online resume parsing software, applicants are reformatting their resumes to catch the employer's eye while being able to make it through the screening process. The objective of this study was to explore writing variation in applications for employment, specifically resumes, to identify best practices for students at Iowa State University. To explore this matter in depth, three sub-objectives were defined:

- 1. To identify discrepancies in resume design and content between students and employers.
- 2. To identify which designs allow for easiest usability.
- To identify resume design best practices when using online submission tools.

2. Methods

Three separate methods were used for each sub-objective. These three methods include a userbased survey, a usability study, and a resume parsing test in addition to a literature review.

User-Based Survey

The user-based survey comprised of 27 questions geared toward two resume user groups: Recruiters and Non-recruiters. All users were asked to rate three different resume designs with the same information based on visual appeal (Figure 1).



Figure 1: General Resume Designs for Survey and Study

The three designs included: (1) a simple timeline format, (2) a standard technical format suitable for resume screening, (3) an infographic format. Students and recruiters were asked to rank them based on how likely they were to consider a candidate with the given resume. The resume was assigned a point value based on the likelihood to select: 0 points- unlikely, 1 point- somewhat likely, 3 points- very likely. In addition, recruiters were asked to note the qualities they look for in candidates, and students were asked to note where they interact with employers. Comments were accepted for all responses to account for selections not listed in the survey.

Usability Study

The usability study was a voluntary study timing how long each user took to find specific items on a resume to simulate what recruiters are looking for when scanning a resume. The resumes followed formats in Figure 1 with different information on each. Items to find were pulled from the top ten recruiting qualities employers look for in candidates as noted in the user survey.

Resume Parsing Test

The resume parsing test explored the functionality of different resume parsing software. The free parsing software through ResunateTM and Jobscan TM was used to test the three sample resume

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formats to see how each format would look after parsing. In addition, the resumes were put up against an actual job description to see which resume "best fit" the position.

3. Results

From the 66 students and 25 employers who responded to the user-based survey, the students' perception of how likely employers were to consider a specific resume format was compared to how likely employers actually were to consider the resume sample as seen in Figure 2.



Figure 2: Comparison of Student Perception versus actual Employer Preference

Employers were also asked the open-ended question, "What key characteristics do you look for in potential candidates." The top ten responses are listed in Figure 3.



Top 10 Recruiting Qualities

Figure 3: Top 10 Recruiting Qualities

Students were also asked to select how they apply for jobs and interact with employers. This data is shown in Figure 4, where the colors differentiate electronic and in-person interactions.



Figure 4: Students' Interaction with Employers

Dow Corning HOK

Hormel Iowa State University John Deere Koch

Kohler Oshkosh

From the usability study, six participants were given each resume and asked to locate the same seven key resume components on each. Figure 5 summarizes the time it took to locate these items for each resume.



Figure 5: Time to Locate Items for Each Resume

From the literature review on screening software, 90% of electronic submissions of resumes from the top 500 US Employers are sent through parsing software (Source: HR Leader). This software follows a 6 step process seen in Figure 6.

1. Resume Converted to Image	>	2. Character Recognition Software Decodes Image	>	3. Characters Converted into Text File
4. Artificial Intelligence Reads Text	>	5. Important Information Extracted	\longrightarrow	6. Keywords Searched to Rate Applicant

Figure 6. Scanning Software Process

Additional results from the parsing test can be found in the link at the bottom of the page. Based on the standard resume scanning process, the following aspects should be considered when designing a resume for electronic submission:

- **File Format**: Submit resumes in PDF or Plain Text format. These file formats are typically easier to read by the software. If submitting it as a Word Document, avoid extra spacing between letters, text boxes or tables, light text, and information in graphics to ensure the file is converted correctly. If you can make a photocopy of it and still read it, it will typically scan.
- **Organization:** Organize resumes in a logical format—*i.e.* First Name, MI, Last Name—so the software can extract information correctly.
- **Keywords**: Use industry terminology, specific words from a job description, or relevant synonyms when describing your work experience. Most scanning packages double check for common spelling errors. Some employers also search by current address to select candidates.

4. Conclusions

Resumes play a major role in the recruiting process. Three major areas to consider when designing your resume include: (1) usability, (2) screening capability, and (3) content.

- 1. Usability: If recruiters take a long time to try and find information, they will move on. Students' perceptions of what employers want in a resume are fairly accurate; design your resume for the recruiter.
- 2. Screening: Students most frequently interact with employers via electronic resume submission. If your resume is not formatted properly to be read in their software, a recruiter may never see your resume.
- 3. Content: Content is what gets you a job. Include accomplishments correlating to the top recruiting qualities—such industry experience and taking on leadership positions—and use industry terminology to make your resume stand out.

Based on the three resumes studied, a combination of Sample 1 and Sample 2 would be best due to usability, professional appearance, preference of employers, and screening capability.

Payless Shoes Procter & Gamble

SpaceX Vicarious Whirlpool Corporation Zimmer

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sume nple	X (mean)	S (standard deviation)	Prediction Interval
1	31.00	8.45	(7.53, 54.47)
2	25.28	4.96	(11.51, 39.05)
3	24.62	13.25	(0.00, 61.42)