
# ALY 6080:
# INTEGRATED EXPERIENTIAL LEARNING

Assignment 4:
The Evolving Landscape of the Recruitment Industry: Investigating How Artificial Intelligence Can Eliminate Hiring Bias in the Recruitment and Selection Process

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**ARTICLE 1**

**APA citation:**

Gomber, P., Legner, C., Huyskens, C., & Wunderlich, P. (2020). Optimizing Recruitment Process with Data-Driven Decision Making. Journal of Computational and Theoretical Nanoscience, 17(9), 4552-4558. https://doi.org/10.1166/jctn.2020.9086

**Summary:**

The article explores the role of data-driven decision making in the recruitment process, and how it can optimize the hiring process. The authors argue that data analytics can provide insights into the candidate pool, improve decision-making, and increase the quality of hires. They suggest that recruitment analytics can be used to analyze resumes and cover letters, track candidate behavior on the company's website, and conduct sentiment analysis on social media data.

The authors conducted a case study with a German logistics company, analyzing data from the recruitment process of 3,000 job applicants. They found that data analytics can help to identify key candidate characteristics and patterns that lead to successful hires. Moreover, data-driven decision making can help recruiters to prioritize their efforts and reduce the time-to-hire.

**Possible Analysis:**

A possible visualization for the findings of the case study could be a scatter plot, where the x-axis represents the key candidate characteristics, and the y-axis represents the patterns that lead to successful hires. Each candidate is represented by a point on the scatter plot, and the color or shape of the point could indicate whether they were successfully hired or not. The plot could reveal clusters or trends that suggest which candidate characteristics and patterns are more likely to result in successful hires.

Another possible visualization could be a Gantt chart that shows the time-to-hire for each job applicant in the recruitment process. The chart could be color-coded to indicate the time spent on each stage of the process, such as reviewing resumes, conducting interviews, and performing background checks. This visualization could help recruiters to identify bottlenecks or inefficiencies in the recruitment process and adjust their efforts accordingly to reduce the time-to-hire.

**Relation to business question:**

The article is related to the business question of how data analytics can be used to optimize the recruitment process. The authors provide a case study demonstrating the potential benefits of using data-driven decision making in the hiring process. The article highlights the importance of leveraging data analytics to make informed decisions and improve the quality of hires. Companies can benefit from this article by learning about the tools and techniques available for recruitment analytics and implementing them in their hiring process.

## ARTICLE 2

**APA citation:**

Modern Hire Launches AI-Powered Automated Interview Creator; Next Gen Structured Interviews Elevate Hiring through More Efficient and Ethical Selection: Empowers hiring teams with optimal interview questions based on unique job requirements across industries to identify best-fit candidates quickly and confidently, while reducing bias. (2022). PR Newswire Association LLC from the provided link.

**Summary:**

The article reports that Modern Hire, a leading hiring software company, has launched an AI-powered automated interview creator to improve the hiring process by making it more efficient and ethical. This technology will enable hiring teams to create optimal interview questions based on unique job requirements across various industries, thereby identifying the best-fit candidates quickly and confidently while minimizing bias. The automated interview creator tool is designed to replace the traditional manual interview process that has been prone to bias, leading to poor hiring decisions.

**Findings:**

According to the article, the use of AI-powered automated interview creators can significantly improve the hiring process by identifying the most suitable candidates quickly and accurately. The software allows for the creation of structured interviews that can be tailored to the specific needs of a particular job, making the

process more efficient and effective. The article also notes that the technology can help to reduce bias in the hiring process by providing consistent and objective interview questions that are not influenced by individual interviewer biases.

**Relation to business question:**

This article is related to the business question of how technology can be used to improve the hiring process. It highlights the benefits of using AI-powered automated interview creators to streamline the interview process, improve efficiency, and reduce bias. This technology has the potential to revolutionize the way companies hire, leading to more successful hiring decisions and increased diversity and inclusion in the workplace.

## ARTICLE 3

**APA citation:**
Crone, C. L., & Kallen, R. W. (2022). Interview with an avatar: Comparing online and virtual reality perspective taking for gender bias in STEM hiring decisions. PloS One, 17(6), e0269430–e0269430. https://doi.org/10.1371/journal.pone.0269430

**Summary:**
Crone and Kallen conducted a study comparing the effectiveness of perspective-taking exercises in virtual reality versus online formats for reducing gender bias in STEM hiring decisions. Participants were asked to take on the role of a job candidate for a STEM position, and then either interacted with an avatar representing the interviewer in virtual reality or completed an online form. The study found that the virtual reality perspective-taking exercise was significantly more effective in reducing gender bias in STEM hiring decisions compared to the online exercise.

**Findings:**
The study found that perspective-taking exercises conducted in virtual reality were more effective in reducing gender bias in STEM hiring decisions than those conducted online. Participants who took on the role of a job candidate and interacted with an avatar representing the interviewer in virtual reality demonstrated a greater reduction in gender bias than those who completed an online exercise. The study suggests that the immersive experience of virtual reality allows participants to better empathize with the job candidate and reduce bias.

**Relation to business question:**
The findings of this study may have implications for businesses seeking to reduce

bias in their hiring processes. By incorporating virtual reality perspective-taking exercises into their hiring practices, companies may be able to improve diversity and reduce bias in their hiring decisions. Additionally, the study highlights the potential benefits of using immersive technology in training and development programs to improve employees' empathy and reduce bias in the workplace.