

Final Paper Details

Soc 121D: People Analytics

Congratulations! You've been hired to by an organization as a people analytics consultant. This company is having an issue managing their human resources, and they are hoping they can solve it with people analytics. You've already spent a good deal of time at the company studying the problem and how the organization is run. Now it is time for you to write up your suggestion(s) to the leaders of the organization. **Your final paper will be this report and should be written as if was being handed to the leaders of this organization.**

Now, what is the problem that you are supposed to solve? What is this organization that has hired you, and what do they do? That, my dear student, is entirely up to you! **An important part of this final paper will involve imagining an organizational setting and creating the very problem you propose to solve.** To give you some direction, though, I'm providing the following list of "prompts":

1. How do we hire the best people?
2. How do we effectively monitor and/or optimize employee/team performance?
3. How do we ensure we're paying our employees fairly?
4. How do we promote diversity?
5. How do we promote a desired organizational culture?

So, hiring might be the general prompt, and it is your job to imagine and write about a specific organization with a set of specific practices that is in some way suboptimal with respect to hiring. You can choose any of these prompts if you wish or you can reach out to me if you have an idea for a different one (please do so soon).

In this class we've tried to focus on both the *promises* and the *pitfalls* of using contemporary analytics for human resource management. In that spirit, you'll need to propose a solution to the problem you've set up, as well as critique your own solution. **Importantly, you cannot receive a good grade on this paper if you don't provide a thoughtful solution as well as a thoughtful critique of that solution.** You might reasonably ask, "but Austin, what if I just come up with a perfect solution to the problem and there are no drawbacks?". Well, that means you came up with a problem that was too easy to solve, and you need to adjust the problem or the setting to make it more complicated, such that even your smart and thoughtful solution still has significant drawbacks.

STRUCTURE OF THE PAPER

In total your paper will have three sections (plus additional introduction and conclusion sections if you'd like). Let me discuss each in turn.

The Setting/Problem

In this section, you will describe the current practices of the organization that have led to the problem. Again, this is entirely up to you to decide/imagine. As a helpful tip, you're going to want to focus in on just the aspects of the organization that are relevant to the problem. Additionally, **you should feel free to make up anything about the organization that makes the paper work**. The one caveat is that you need to make sure you are consistent (e.g., don't say that "all the employees eat lunch at noon" in one paragraph and in another say that "all the employees eat lunch at 2:00 pm"). Since there is a whole section on outlining the current practices, you shouldn't introduce new facts about the organization in the later sections.

The Solution

Here, having clearly identified the problem in the previous section, you propose your solution to the leaders of the organization. Remember that this is a people analytics class, so your solution should use some of the contemporary analytics tools we've discussed in class (data science, machine learning, digital trace data, text analysis, network analysis, pay equity analysis, etc.).

When you write this section, **you should assume your reader has no understanding of contemporary analytics**. In other words, don't just say "I will use a random forest". You need to explain (the pertinent aspects of) what a random forest is. Now, your reader might not need all the "gory" details (e.g., what cost function a random forest is seeking to minimize), but they will likely need to know e.g., that it is an algorithm that learns to predict one variable (an outcome) from a set of other variables (features). However, it's also okay to just say something like "I propose we use a supervised machine learning algorithm, trained on *[whatever features]* to predict *[whatever outcome]*. *Selecting the exact algorithm is beyond the scope of this report*". Imagine this paper being read by your parents or your roommate who is getting their degree in Comparative Literature.

The Drawbacks

Having proposed your solution in the prior section, here you need to offer the leaders of the organization the reasonable concerns one might have with your proposal. These could be financial (e.g., the solution might cost more than it's worth and it's difficult to know until it's too late), ethical (e.g., the solution might inadvertently cause there to be bias in hiring against a certain demographic group), or something else. **Importantly, you want these drawbacks to show you understood the class material well and that you thought deeply about it (see the grading section)**. If you're having trouble doing this, you should consider re-visiting "The Setting/Problem".

REQUIREMENTS

Now let's talk specific requirements.

- **You should use 12-point Times New Roman font with 1" margins, single-spaced.** See the example paper. If your paper looks drastically different from it, you might be doing something wrong.
- **Each of the three sections should be at least 600 words.** This is a *bare minimum*, and you'll see that in the example paper that each section was significantly longer than this. If each section is only 600 words, you might not meet the page requirement. This additional requirement ensures that you don't e.g., spend the whole paper on "The Setting/Problem" while ignoring "The Drawbacks".
- **The paper should be three to eight pages in total.** That's a big range. As I was writing the example paper, I realized I could imagine someone wanting to provide rich descriptions and multiple cool ideas, so I wanted to give room for that. If you end up with three (full) pages, though, that's completely fine with me.
- **You should bold concepts you bring in from class.** This will give me an objective criterion to check my subjective assessment of the connections you make between the paper and the class material. I expect there to be concepts from class in all three sections. See the example paper.
- **The paper should not have any spelling or grammatical errors.** (According to widely held norms of Academic American English). You should make sure you spell check everything and read it multiple times for grammar. If you tend to struggle with this, the Hume Center on campus can be a helpful resource.

GRADING

Now let's talk grading. The paper will be graded on three criteria:

1. **Requirements:** Does the paper meet all the requirements in bullet points above? (20%)
2. **Understanding:** Do you demonstrate a strong understanding of the course material throughout the paper? (20%)
3. **Thoughtfulness:** Does each of the three sections ("The Setting/Problem", "The Solution", and "The Drawbacks") demonstrate that you thought deeply about it? Is the solution innovative? Are the drawbacks considered insightful? (60%: 20% for each section)

NOTE: You will likely need to iterate between working on the different sections of the paper. If you end up writing "The Drawbacks" up and there's not enough material there or it doesn't show thoughtfulness, you might need to go back and change "The Setting/Problem" to make it more complicated, which in turn might lead you to need to change "The Solution".