Assignment 4: Team Presentation 3

1 General Directions

This homework must be done in a group of two people; we will use the same groups as for the previous homework.

See Webcourses and the syllabus for due dates and presentation schedule.

2 What to Turn in

For this assignment, upload a PowerPoint file (or a PDF file if you are using some other presentation software such as Keynote) to Webcourses. The file name should include all names of the team members in your group, starting with the one whose family name is earliest in alphabetical order, with hyphens between the names and a comma separating the two names, followed by a suffix that accurately reflects the file format. For example your file might be named `Jones-Margaret,Smith-Jane.pptx` (or `Doe-John,Zimmer-Frank.pdf`).

Your presentation slides should follow a good outline, as described in class. The your slides should have a bibliography (i.e., a list of the references you consulted), which should appear in a slide (or two) at the end of your talk. You need not actually present these references during the talk, they are there for backup (and further study by those interested).

3 The Assignment

Select a topic, confirm it by email, and then make a presentation, ideally of 15 minutes, which must be at least 13 minutes long and no more than 17 minutes long on a topic of your choice (see below).

Your presentation must be delivered jointly by your group, with all group members speaking an approximately equal amount of time.

3.1 Topic Selection and Confirmation Email

By February 18, you must email the instructor with the subject "Topic selection for homework 4 in COP 4910" with the following information:

1. Your group members names.
2. The problem that your presentation will address.
3. The kind of innovation that you will be discussing.
4. The enterprise (or kind of enterprise) that has this problem and that the innovation would help.
5. The title of your presentation, which should be of one of the following two forms:
   (a) "Avoiding ⟨bad consequences⟩ using ⟨the innovation⟩ for ⟨the enterprise⟩" or
   (b) "Enhancing ⟨good consequences⟩ using ⟨the innovation⟩ for ⟨the enterprise⟩".

   where ⟨bad consequences⟩ or ⟨good consequences⟩ would be replaced by the name of some negative or positive consequence, ⟨the innovation⟩ would be replaced by the name of a innovation (solution approach), and ⟨the enterprise⟩ would be replaced by the name of the enterprise (or kind of enterprise) that has this innovation would help solve the problem for.
6. A ranked list of 3 dates that you would like to present on (see the online syllabus for the possibilities), with the first being your most highly desired presentation date. (Note that there are bonuses for the first and second days of presentations.)

After receiving your email, your instructor will (promptly) email you back to either confirm the topic selection by your group or to ask for changes or clarifications.

To avoid duplication in topics, you will be required to change your topic if some other group is presenting on the same consequences or topic. If two or more groups want to present on the same consequence or topic, the first group to send in the email about that topic will be allowed to proceed, and the others will need to make a change. Presentation date preferences will also be honored as best as possible on a first-come-first-served basis.

The kind of consequences you are proposing (see above) should be something that is directly affected by IT practices. This innovation affecting these consequences may need to be developed in the enterprise, or it may be something that can be purchased. The innovation need not be some new hardware or software, it could be a new process (way of working). The innovation should be specific, not something general (such as "AI"), and it should be something that is not widely known (so that we will all learn something from your presentation).

Consequences could be ethical or social effects of IT practices. However, they should be specific, such as "loss of location privacy" instead of "loss of privacy." See below for some ideas about what kinds of consequences might be sensible.

The problem selected (see above) must be a specific problem that affects the kind of enterprise (or kind of enterprise) that you have selected. Ideally it should be an important problem that affects the enterprise in a measurable way, or an important ethical or societal problem that affects that enterprise or its customers. There must be a business motivation for avoiding (or enhancing) the bad (or good) consequences you identify (e.g., increasing revenue or avoiding losses, or lowering costs). The consequences and innovations must be specific, and not general or nebulous (like "security").

The enterprise could be either a business (e.g., Lockheed Martin) or a non-profit organization (e.g., the Red Cross), or a government agency (e.g., the Department of Energy) or it could be a category of businesses (such as automobile manufacturers). It is best if you pick a particular enterprise and a focus (sector) within that enterprise (especially if the enterprise is very large). If the enterprise or focus does not yet exist, you will need to define it clearly.

3.2 Tips on Finding a Topic

Ideally, the class will learn something new from your presentation, so it is best to choose a consequence and innovative solution that reflect recent innovations.

Consequences that matter are ultimately those that affect people. For example "loss of X privacy" where X is some particular attribute, such as "location," "political viewpoint," "gender preference," or "religious preference." Consequences could also be about employment, especially if these involve adding or subtracting jobs in IT. Other consequences might be about health (e.g., worker injuries) or environmental issues (e.g., climate change). Consequences might also affect society at large, such as inclusion or civility of discourse, although such issues tend to rapidly become political, and we would prefer to have a reasoned analysis of consequences rather than empty political statements.

Other broad areas to think about to find more specific problems include:

1. Accessibility and inclusion issues
2. Security issues
3. Privacy issues
4. Customer Experience issues
5. Healthcare and wellness issues (both for customers and employees)
6. Competition and disruption from use of AI
7. Competition and disruption from use of DevOps or Cloud Computing

The course resource page has information that may be helpful for finding topics.

To find innovations, the Gartner Hype Cycles and Technical Insights can give some ideas. Other sources for innovations include journal articles and online resources.

After settling on an innovation, you may need to backtrack to find the kind of problem that this innovation will aid in solving and its consequences. Some useful resources for that include the Gartner Magic Quadrants and Critical Capabilities available when logging in on campus (or through logging in to the UCF library) has various use cases that can be read to understand problems and ranks vendors that provide solutions. These include problems and use cases in the following broad areas:

- Software Infrastructure
- IT Services
- IT Management
- Business Applications
- Operations Management
- Communications Services

Other sources for problems include journal articles and online resources.

3.3 The Presentation

You should practice your talk and aim to be able to deliver it in the allotted time. Note that you may tend to talk more quickly in front of the class, so allow for that.

Have a backup presentation (on a memory stick or in an online storage service like OneDrive or in email), so that you will be sure to be ready to present when called on.

Grading

This assignment is worth 100 points distributed as:

- 5 points: initial email about the topic.
- 10 points: length of time (neither too long or too short, as specified above); for every minute over the maximum you will lose 5 points and for every minute under the maximum you will lose 5 points.
- 10 points: eye contact with audience; we will take points off if you read from your slides, depending on the severity of the issue.
- 10 points: voice volume; we will take points off if you do not speak loudly enough or speak too loudly.
- 10 points: presentation slides; if slides are too wordy or have other distractions, then we will take points off, depending on the severity of the issue.
- 35 points: clarity of presentation with
  - 5 points for a good outline (problem, solution, consequences)
  - 10 points for a clear presentation of the problem
  - 10 points for a clear presentation of the solution (approach)
  - 10 points for a clear presentation of the consequences of the solution on the enterprise and on society (or the world)
- 10 points: clarity of analysis and thought, critical thinking, especially related to the consequences and their interaction with IT; we will take points off for analysis that is not thoughtful (i.e., that is glib or facile).
- 10 points: bibliography (i.e., a list of the references you consulted), which should appear in a slide (or two) at the end of your talk. You need not actually present these references during the talk, they are there for backup (and further study by those interested). For maximum points you must have at least 2 references in your bibliography.

Both group members will receive the same points for the presentation.
There will be the usual penalties for being late or not prepared or missing class.