

Appendix A. Team analysis report template

Analyst:

Prepared for:

Purpose:

Contact Info:

Date Prepared:

Title: Report Summary, Case of the Red Hat Robbers

1. Working Hypothesis as BLUF (Summarizes what you believed happened)

2. ANALYSIS of Findings:

- Supporting Facts & Inferences
- Supporting Facts & Inferences
- Supporting Facts & Inferences

3. Conclusion/Summary (align with BLUF)

In a separate file, answer these questions

1. If your team was using CAnalytics, answer the following questions

- How did your group divide and coordinate the project work?
- Did you work only in class, or also outside class? If so, how did you work outside class (face-to-face, online at the same time, online at different/various times). How was this work different from the work you did in class?
- What analytics strategies did your group apply?
- How did your group use CAnalytics to carry out your analytic strategy?
- How did CAnalytics help you stay aware of your teammates' activities? Give examples to support your answer.
- Describe problems you had coordinating with your group when using CAnalytics. Give examples to support your answer.
- How was your team doing differently compared to when you did not have CAnalytics (when you analyzed the passenger scenario)

2. If your team was NOT using CAnalytics, answer the following questions

- How did your group divide and coordinate the project work?
- Did you work only in class, or also outside class? If so, how did you work outside class (face-to-face, online at the same time, online at different/various times). How was this work different from the work you did in class?
- What analytics strategies did your group apply?
- What tools did your group use to carry out your analytic strategy?
- How did you stay aware of your teammates' activities while you were performing your task?
- Describe problems you had coordinating with your group. You can give a few examples.

Appendix B. Pre survey

Demographic

1. Gender

2. Age

3. How much experience do you have working on the following teams (e.g. 3 months, 2 years)?

a. Class-based teams (e.g. course project groups) _____

b. Business teams (e.g. internships, summer jobs) _____

c. Intelligence analysis teams (either in class, lab, or professional institutions) _____

d. Other teams. Please explain _____

4. Please rate your level of agreement with each of the following statements on a scale of 1-7

- I prefer to work alone rather than in group
- I enjoy working in a group situation

Usability

Rate at how you agree to the following statements on a scale of 1-7

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

Open ended

1. What problems/bugs with the tool did you encounter?
2. What improvements of the tools do you desire?

Your PSU email

Note: this information will only be used to link together the responses that you provide for the various surveys administered in this study. The information will not be used for identification purpose.

Appendix C. Mid-survey

Think about your work with your teammates today, and answer these questions

1. It was easy to find what my teammates had worked on in the collaborative space
2. I was always aware of what my teammates were doing while we were online
3. I was never aware of what my teammates were going to do next
4. My teammates had a definite sense of direction and purpose

The following questions ask you to comment on the performance of your teammates TODAY. First write the name of your teammates. Leave Teammate C blank if you only have two teammates. (This information is used for research only and will not be used for identification or grading purpose)

Teammate A:

Teammate B:

Teammate C:

Think about the performance of Teammate A TODAY, and rate how you agree to the following statements

1. S/he participated actively
2. S/he shared many ideas related to goals
3. S/he exhibited leadership skills
4. S/he reflected awareness of others' views and opinions
5. S/he built upon others' contributions

Think about the performance of Teammate B TODAY, and rate how you agree to the following statements

1. S/he participated actively
2. S/he shared many ideas related to goals
3. S/he exhibited leadership skills
4. S/he reflected awareness of others' views and opinions
5. S/he built upon others' contributions

Think about the performance of Teammate C TODAY, and rate how you agree to the following statements

1. S/he participated actively
2. S/he shared many ideas related to goals
3. S/he exhibited leadership skills
4. S/he reflected awareness of others' views and opinions
5. S/he built upon others' contributions

Appendix E. Post Survey

Awareness

1. It was easy to find what my teammates had worked on in the collaborative space
2. I was always aware of what my teammates were doing while we were online
3. I was never aware of what my teammates were going to do next
4. My teammates had a definite sense of direction and purpose
5. Over time, my teammates and I came to share more and more ideas about the problem
6. Over time, my teammates and I have developed our own ways of working together
7. Over time, my teammates and I became more capable of collaborating remotely than when we started

Collective efficacy

1. Our group can integrate the unique ideas of different members even though it could be easier to just pick one idea.
2. Our group can converge on a single idea even though each person tends to see things through the lens of their own experience and interests.
3. Members of our group can share ideas without fear of criticism from the group.
4. Our group can manage conflicts and differences of opinion constructively though someone's feelings could be hurt.
5. Members of our group can compromise when necessary even though everyone has their own unique perspective.
6. Members of our group can establish and maintain awareness of partner activity although this can require extra of time and effort.

Group cohesion

1. I enjoyed communicating and sharing ideas with my teammates
2. I enjoyed collaborating with my teammates
3. I clearly felt part of a team after working with my teammates on the project
4. My teammates and I wasted a lot of time

Communication and common ground

1. I found it difficult to keep track of our conversation
2. It was hard to communicate effectively
3. I can think of a number of times when I did not understand the information I received from my teammates
4. It is often necessary for me to go back and check the accuracy of information I received
5. I can easily go back and check the accuracy of information I received
6. I sometimes feel that others don't understand the information they have received.
7. When people talk to each other in this group, there is a great deal of understanding

Information overload

1. During the conversation I was able to focus on the task at hand
2. I was too busy with my own task to pay attention to what my teammates were doing
3. Too much information was displayed that I often lost my thread.

Perceived performance

5. My teammates and I produced a high quality work by working on this project
6. My teammates and I produced higher quality work by working together than we would have produced by working individually on the same project
7. I could imagine that our group produced higher quality work than average

Cognitive load – NASA Task Load Index

1. How mentally demanding was the task?
2. How hurried or rushed was the pace of the task?
3. How successful were you in accomplishing what you were asked to do?
4. How hard did you have to work to accomplish your level of performance?
5. How insecure, discouraged, irritated, stressed, and annoyed were you?

The following questions ask you to comment on the performance of your teammates over the week. First write the name of your teammates. Leave Teammate C blank if you only have two teammates. (This information is used for research only and will not be used for identification or grading purpose)

Teammate A:

Teammate B:

Teammate C:

Think about the performance of Teammate A over the week, and rate how you agree to the following statements

1. S/he participated actively
2. S/he shared many ideas related to goals
3. S/he exhibited leadership skills
4. S/he reflected awareness of others' views and opinions
5. S/he built upon others' contributions

Think about the performance of Teammate B over the week, and rate how you agree to the following statements

1. S/he participated actively
2. S/he shared many ideas related to goals
3. S/he exhibited leadership skills
4. S/he reflected awareness of others' views and opinions
5. S/he built upon others' contributions

Think about the performance of Teammate C over the week, and rate how you agree to the following statements

1. S/he participated actively
2. S/he shared many ideas related to goals
3. S/he exhibited leadership skills
4. S/he reflected awareness of others' views and opinions
5. S/he built upon others' contributions

Tool-specific

1. My teammates and I could easily assemble our findings in the notepad tool
2. The history tool keeps me aware of my teammates' activities
3. The notification of teammates' activities was useful as it kept me aware of what they were doing
4. The notification of teammates' activities was annoying and distracting.
5. I found the little icons on each tool window title bar useful because they kept me aware of where my teammates were working on
6. Being able to refer to entities in the message tool (by typing '@') makes the conversation more effective.
7. I preferred to use the message tool than to talk to my teammates as I could refer to the entities directly in the message tool

Usability

1. I think that I would like to use this system for other information analysis tasks.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.