**Problem Solving Work Shop (Technical)**

Group Members:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Problem:**

A user in your small company says they have always saved documents to their desktop for easy access. Yesterday they saved a document to their desktop but now it is not there. If they open their word processor and select “recently opened documents” they can see the document and open it but it is not on their desktop. Explore, analyze and provide solutions for this problem.

1. Define the Problem

What is happening?

Where is it happening?

When did the problem start?

Who is affected by the problem?

What is the goal or purpose in solving this problem?

2. What are the potential causes of the problem?

Draw and complete an Ishikawa (Fishbone) Diagram for your problem.

3. Generate Ideas

Use brainstorming to generate a mind map of ideas about the problem, its potential causes, and potential solutions.

4. Select the best solution

What is the most likely cause, what is your solution, and why? Consider as many factors as possible in your decision (time, money, manpower etc.). Include any trade-off analysis that is applicable to the problem.

5. Action

How will you implement your solution? Draw a flow chart to help explain your problem solving process. (You can use the back of the last page of this booklet if you do not have enough space here).

**Presentation:**

Your group will provide the class with a short (approximately 5 minutes) presentation on this problem. This will be presented next class.

Your presentation must include:

* An introduction of your group members
* An explanation of your problem
* A list and explanation of the possible causes of the problem as well as what your group believes is the most likely cause and why
* An explanation and reasoning of your solution as it has been laid out in your flow chart

Your group must also prepare a short PowerPoint to supplement your presentation. Your PowerPoint must include:

* An Intro slide with the names of all group members
* A list of potential causes
* A clean, easy to read version of your flow chart
* A concluding slide

Your group must also submit a well-formatted, organized, and clean typed document containing all the questions on this booklet and your groups answers to them. **This will also include a one page write up (double spaced) detailing the implementation of your solution** which you laid out in your flow chart.

Your PowerPoint and write up can be submitted via print out or email.

**This booklet must be submitted to your professor upon completion of your presentation.**