**Problem Solving and Decision Making Techniques**

**INTRODUCTION**

How many times have you said, “Oh no, not another problem”? The thought of having to deal with problems and then to make important decisions can overwhelm you. Sometimes you do nothing and wish the problem will go away; other times you rally the help of others to find a solution; or you may rely on past experiences to make a quick decision.

Although there is no specific formula that will guarantee quick solutions to your problems, there are some steps that you can follow which will provide you with a basic process that you can apply to your day-to-day problems.

**What is Problem Solving?**

It is a process of transforming one situation into another by removing, overcoming or navigating around obstacles. It is also a way of figuring out a wonderful way to reach a destination or a goal. It often involves the organized collection of facts (who, what, when, where, how, why) of problems that are originally described in vague and general language.

**The Problem-Solving Process**

Problem solving is a complex process and often is not easily broken down into clear stages. However, here are seven steps that will guide you in identifying the real problem and its cause. You may get to a step and find you have to retrace your steps and start again. The order of the steps is flexible to accommodate complications that may arise in different problems.

**STEP 1: RECOGNIZE THAT A PROBLEM EXISTS**

* **You have received a written or oral complaint from an individual.**
* **You are not satisfied with the standards you have set.**
* **Recent events cause you to question present or future plans and decisions.**
* **You have to seek advice and help from your director or someone else.**

**Practice Exercise:** The Women’s Ministries evangelistic team of Tarlac has been doing some ground work for two months, but the reaping campaign at the end of last month showed only one baptism. Is there a problem?

**STEP 2: DEFINE AND DEVELOP A PROBLEM STATEMENT**

Develop a problem statement that accurately and clearly describes the current problem. Consider the following questions:

* **Is the problem stated objectively?**
* It should not leave room for interpretation.
* It should be a simple statement of fact.
* **Is the problem limited in scope?**
* **Does everyone involved have a common understanding of the problem?**
* It should be written in such a way that everyone should understand it.

A couple more hints for you to keep in mind when developing a problem statement:

 • Avoid including any **“implied cause”** in the problem statement

• Avoid including any **“implied solution”** in the problem statement

 **“The organization of Women’s Ministries has created
a rift between many women and Dorcas Society.”**

What is the cause (s) implied in this problem statement?

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 **“The Women’s Ministry Co-operative needs
to be revamped and reorganized”**

What is the solution(s) implied in this problem statement?

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**QUESTIONS TO CONSIDER:**

* Is the problem stated objectively and include “just the facts”?
* Is the scope of the problem limited enough for you to handle?
* Will everyone who reads it have the same understanding of the problem?
* Does the problem statement include any “implied causes” or “implied solutions”?

**STEP 3: ANALYZE POTENTIAL CAUSES BY GATHERING DATA**

“*I keep six honest serving men*

*(They taught me all I know);*

*Their names are What and Why and When*

*And How and Where and Who.”*

Rudyard Kipling

This stage of problem solving involves asking many “why” questions, gathering information, and sifting out the causes. Analyzing potential causes effectively is best accomplished by following these key sub-steps:

* Identify potential cause(s)
* Determine the most likely cause(s)
* Identify the true root cause(s)

You could identify potential and root causes by using:

**Cause and Effect diagram**

1. Condense your problem statement to one key word or phrase.

For example, low baptism rates.

1. Define the major categories of causes of the problem.

For example, major categories of causes are Methods, People, Materials, and Time.

1. Brainstorm possible causes.

Come up with as many ideas as you can in each category.

**Brainstorming** – suggesting all possible ideas and eventually narrow them down to a few possible solutions.

**Charts or graphs** – Use a pie chart or bar graph to map out the causes of your problem.

**Practice Exercise:** Show on a chart what are the potential causes why people are not coming to the Women’s Ministries free screening program in this village.

**STEP 4: IDENTIFY POSSIBLE SOLUTIONS**

Once the causes of the problem have been identified, it is important to generate ideas and alternatives for solving them. There are different techniques one can use, but one of the most effective and widely used techniques is brainstorming.

**BRAINSTORMING**

This is a very useful and effective way for generating possible solutions and ideas. It is best when used in group problem-solving situations. It is a fast-moving process that can be used at different stages of the problem-solving process.

**Brainstorming Rules**

* **Avoid criticism and “*knocking down”* of ideas**
* **Look for wild/exaggerated ideas**
* **Go for quantity–at least 20 or more**
* **Try to build on the ideas of others (when in groups)**
* **“Think outside” of your own experience and expertise**

The two most common Brainstorming methods are:

###  METHOD THE WAY IT HAPPENS

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**Freewheeling** - Share ideas all at once

 - Make a list of the ideas as they are “shouted out”

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**Round Robin** - Everyone takes a turn to offer an idea

 - Anyone can pass on any turn

 - It continues until everyone has had a chance

 - Make a list of all the ideas as they are offered

 **Pros: Cons:**

 **\*** Allows for creativity. **\***  Time consuming.

 **\*** Allows one to “think out loud”. **\*** Tendency to evaluate suggested

 **\*** Quantity of ideas allows room ideas too soon, hence discarding

 for throwing out some later. them before giving a second thought.

 **\*** Helps the mind to stretch creatively. **\*** Solution generating sessions

 **\*** More people can participate in

giving input can be dominated

 by one or two persons.

**STEP 5: DETERMINE THE BEST SOLUTIONS**

This step is important in selecting the best solution(s) for your problem. The following sub-steps will help you in your selection.

**A. Develop and assign weights to criteria:**

It is important for you and your team to agree on the criteria for selecting the best solutions. Make sure that you clearly define each criterion so that everyone has the same definition in mind.

Apply weighted percentages to the criteria to show how important they are in relation to each other. This can be done by assigning a number to each criterion so that all the criteria totals 100.

For example, the Women’s Ministries of a union is considering starting a counseling program for the community at the church. They chose 4 criteria that would help them decide if they should run such a program.

**Criteria Weight**

Ease of implementation 20%

Probability of success 20%

Effectiveness of program 50%

Meeting the need of community 10%

#### Total weighing 100%

####

**B. Apply the criteria**

Rate each possible solution on your list against the criteria. You can do this by giving a score (on a scale of 1 to 10, for example) to each solution for the first criterion, then moving down and repeating this process for each of the other criteria. After a score has been assigned to each box, multiply the score by 10. Then add up the weighted scores for each solution.

Example: Women’s Ministries of Central Luzon Conference is considering buying a building to use as a center for teaching literacy and livelihood skills to women in the community. The following 4 criteria were chosen for making this decision (e.g. location, cost, size, design). Rate the three buildings you are looking at against each criterion. Then multiply the rating by 10 to come up with a weighted score (in parenthesis).

**WM Building Sample:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Criteria | **Weight** | **Building 1** | **Building 2** | **Building 3** |
| Location | 40% | 40% | 10% | 35% |
| Cost | 30% | 20% | 25% | 25% |
| Size | 20% | 10% | 15% | 20% |
| Design | 10% | 5% | 7% | 10% |
| **Totals** | **100%** | **75%** | **57%** | **90%** |
| **Summary** |  | **Nice location;****Small** | **Great house;****Poor location** | **Large house;****Good price/design** |

**C. Choose the Best Solution(s)**

After the weighted scores for each solution or option are tallied, take some time to examine them carefully. Look at the one with the highest score or the two with the highest score. Evaluate it against the identified criteria again. Then choose the best solution to be implemented.

**In the previous example Building 3 was best suited for our needs.**

After the right solutions have been identified, however, it doesn’t mean your task is completed. Now comes the tough part, turning the solutions into reality by following through with many other plans—to actually solve them.

 **STEP 6: DEVELOP AN ACTION PLAN**

Now that you have decided on a solution, it is time to get down to action. But, what action? Where do you start? Who is going to do what, when, and how?

The following two steps will help you address these questions and develop your Action Plan.

1. Divide the solution into sequential tasks**.**

**2. Develop a contingency plan.**

• Note responsible persons

• Schedule (target dates) for starting and completing

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Action Step Task/Activity  | **Responsible Person/Group** | **Begin** **Date** | **End****Date** | **Estimated Hours** | **Cost** |
| Lay groundwork for Bible studies | Lila to lead | 5/3 | 8/3 | 16 | $ 6,000  |
| Pass out invitation cards | Miriam to LeadAll WM involved | 9/3 | 10/3 | 6 | $ 2,000  |
| Organize cell group | Ron | 12/3 | 1/3 | 20 | $ 2,000  |
|  |  |  |  | **42 hours** | **$10,000**  |

**Questions to Consider:** Address more questions regarding implementation. Draw out an overall view of your action plan.

* Have you considered those who will be affected?
* Have you considered the resources that will be needed?
* Have you considered how information will be shared?

**CONTINGENCY PLANS**

Develop contingency plans.

* Such plans are helpful in case your plans got stalled, sidetracked, or had to change midstream

• With a contingency plan on the back burner, you can keep your momentum going.

While you can’t stop the unexpected from happening, you can prepare for potential snags in your programs by having a contingency plan—a second plan of action. Such plans keep the momentum going instead of stopping everything you are doing.

**Points to Consider:**

* What specific opportunities and threats may occur?
* How will you deal with those opportunities and threats?
* What can be done to prevent those potential problems from occurring?

**STEP 7: IMPLEMENT SOLUTION AND EVALUATE PROGRESS**

This final step is vital to the success of the solution. You could implement the following three sub-steps to make this final stage of problem solving work successfully.

 1. Collect data according to the Action Plan.

• Monitor the specific tasks that are performed

• Identify milestones and areas that are working

• Schedule meetings and reviews

2. Implement contingency plans as necessary.

 • As conditions change, implement the contingency plan to continue moving toward the “desired state”

 3. Evaluate results

• Onsite visit, interviews, or checking to see if the solution is working

• Identify new problems that may arise

**Pitfalls of Problem Solving**

Problem solving can be challenging and frustrating at the same time. There are many pitfalls on the path to successful problem solving. You should be aware of the following seven pitfalls and avoid them.

1. Working on problems that are too general, too large, or not well defined.

2. Jumping to a solution before really analyzing the problem.

3. Failing to involve critical decision makers or persons affected by the problem when identifying potential solutions.

4. Tackling problems that are beyond the control or influence of the individual or group.

5. Applying “pet” solutions rather than seeking a creative solution.

6. Failing to develop good reasons for choosing a solution.

7. Failing to plan adequately how to implement and evaluate the chosen solution.

**About the author**

**Linda Koh** was born and raised in Singapore. Prior to her appointment to the General Conference Children’s Ministries Department, Linda served for nine years as director of Children’s, Family, and Women’s Ministries of the Southern Asia Pacific Division, based in the Philippines. She obtained her Doctor of Education degree in Educational Psychology and Counseling from Andrews University, Michigan, USA, and has 24 years of teaching experience behind her, ranging from elementary to the college level.

She is happily married to Oliver Koh, former Associate Education Director of the Southern Asia Pacific Division. They have two grown sons, Terrence and Marvin, and five grandchildren. She enjoys working with children and people from all walks of life. She has served as a resource person for the Singapore government, giving talks and conducting seminars on child development, parenting, and family life relationships.