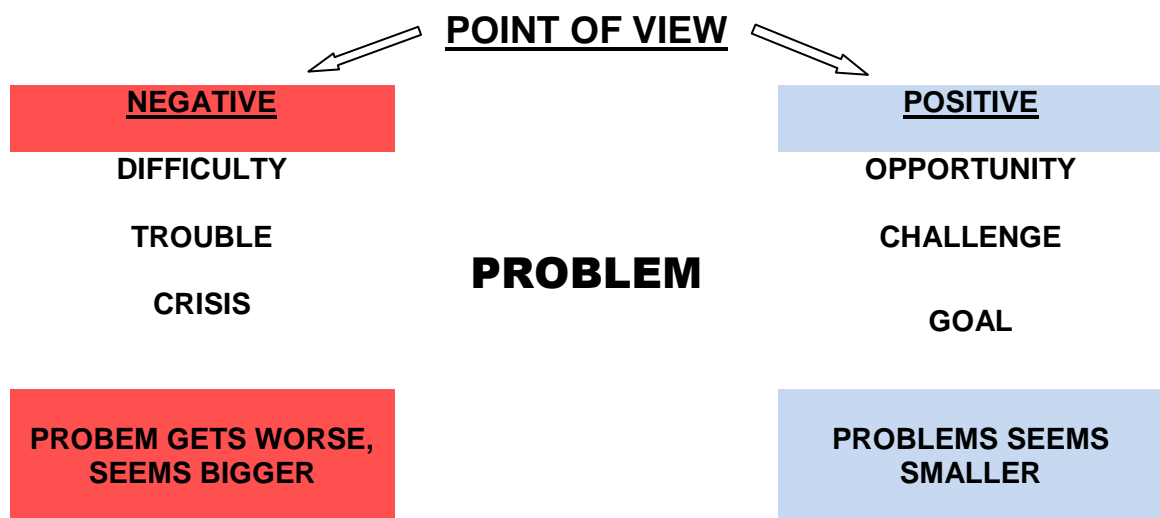


SOLVE PROBLEMS BASED ON PREVIOUS EXPERIENCE.

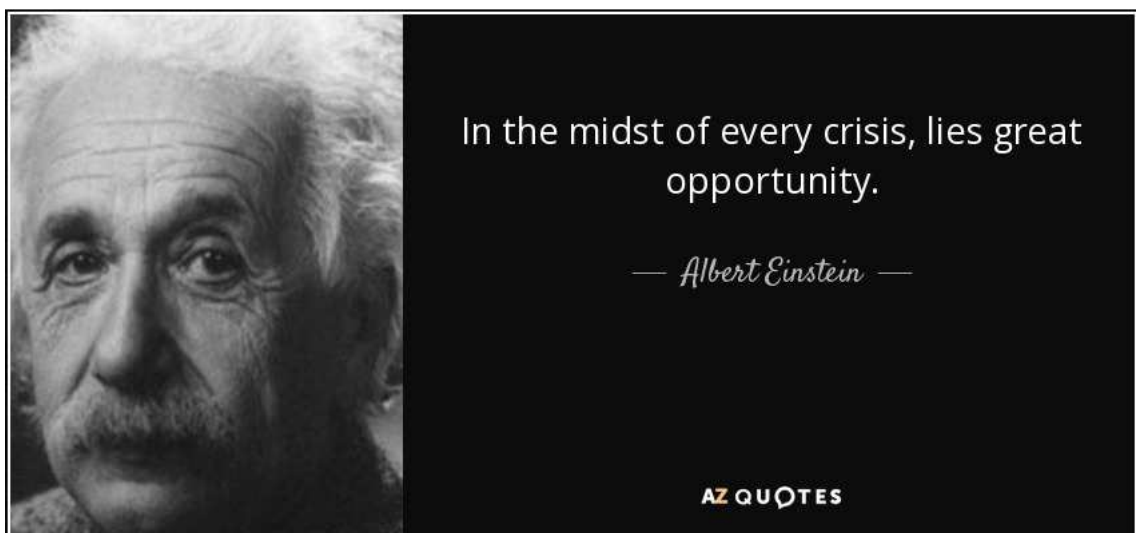
WHAT IS A PROBLEM?

A problem could be any question or matter involving doubt or difficulty or a question proposed for solution or discussion. You can find this definition in a dictionary but the important thing is what really means a problem for us. The word problem can have a negative connotation for us and sometimes we get scared and concerned only with hearing the word. For this reason I would like you to think in a positive way when some problem appears in your life. You will have lost of problems in your life, everybody has them, but your point of view is the most important, that makes the difference. When you think in a positive way half of the problem has been solved. In the opposite hand when you see the problem from a negative point of view it seems it get bigger and more complicated.



We can see that the problem is always the same but depend on your point of view can be perceived as worse or better. We must learn to think in a positive way and then a problem can be a challenge, an opportunity to learn.

Albert Einstein said that "In the midst of every crisis, lies great opportunity". He thought that where there is a crisis might be a great progress, the crisis make you work harder and with a extra effort to overcome it and then you will try your best and that is an opportunity to improve.



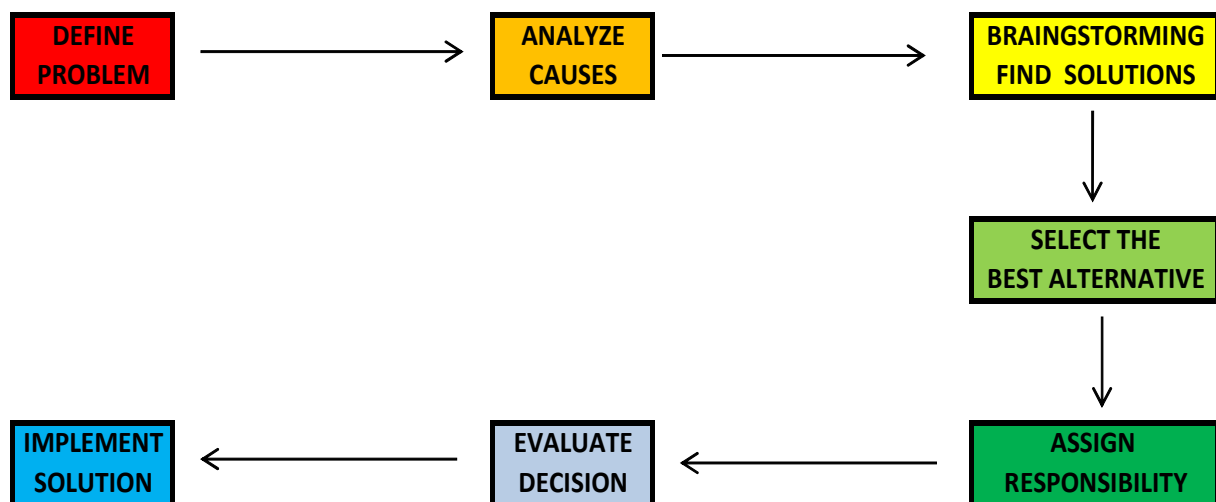
"Do not pretend that things will change if we always do the same. The crisis is the best blessing that can happen to people and countries, because the crisis brings progress. Creativity is born from the distress, as the day is born from the dark night. It is in crisis that invention, discovery and large strategies are born. Whoever overcomes crisis, outdoes himself without being overcome."

By Albert Einstein

PROBLEM-SOLVING:

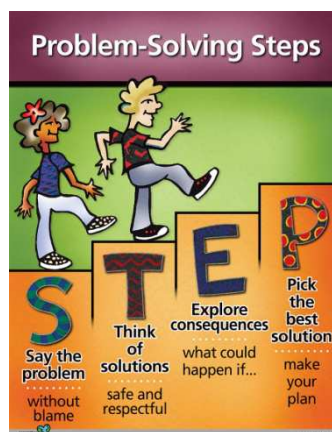
The term problem-solving is very common and with different meanings: in psychology it is a mental process, in computer science it is a computerized process, etc...We are going to pay attention to economics definition: the problem-solving refers to the process of working through details of a problem to reach a solution. It may include mathematical operations and shows the critical thinking skills of a person.

BASIC STEPS IN SOLVING PROBLEMS:



There are many techniques in solving problems but I think this sums up the basic steps in solving problems, as follows:

1. Define the problem.
2. Analyze the problem's causes.
3. Find all possible solutions - brainstorming.
4. Select the best alternative.
5. Assign responsibility for carrying out the decision.
6. Evaluate the decision to check whether it has been successful or not.
7. Implement solution.



1 - Define the problem:

First you have to recognize there is a problem and then you must identify the problem. Look at the problem from multiple perspectives. Sometimes different people might have different views of what the problem is.

2- Analyze the problem's causes.

Identify and organize the problem's causes. In business, in a company you can focus your attention on different aspects:

- People: its behaviour, its participation level, whether they are or not helpful, etc...
- Resources: its quantity, its identifications, whether they are or not used effectively, etc...
- Environment: too much stress, the power structure, management support to employees, etc...
- Processes: easily understandable, well defined, etc...

3 - Find all possible solutions - brainstorming.

I would recommend making a list with all the possible solutions that appear to be studied and took into account to be able to decide which is the best. There are many techniques to do it and one of the most popular is brainstorming.

Brainstorming:

It is a technique of solving specific problems, amassing information, stimulating creative thinking, developing new ideas, etc.. by unrestrained and spontaneous participation in discussion. What means is that when we have a problem everybody participate saying any idea which comes to their brains as fast as they can to develop a new one or to cause somebody else has a new idea based in the first one.

4 - Select the best alternative.

Go through your solutions' list and select the best ideas and analyze their advantages and disadvantages to decide which one will be the best decision. The best solution will be the one which has more advantages.

In business you should take into account the follow criteria:

- Costs.
- Time.
- Availability of manpower
- Availability of materials, etc..

The best solution will be the one which has more advantages and less disadvantages. For instance, it should have less costs, short time, availability of manpower and materials, etc...

5 - Assign responsibility for carrying out the decision.

We have to assign responsibility for carrying out the solution we have selected. We need to design a plan of actions (action plan) including all the details you need to consider to carry it out. In your plan of action you should answer the following questions: who, what, how, when, where. Who will

carry out the solution? What course of action will be taken? How the course of action will be presented? When will it happen? Where will it happen? Solutions and plans of acting must be flexible because it may occur something unexpected.

6 - Evaluate the decision to check whether it has been successful or not.

Once you have a plan of action, before you implement it you should check it to see if you have considered as many as variables as possible, such as the number of the people to carry out it, the delivery time whether is realistic or not, etc...

7 - Implement solution.

Now we must carry out the action plan previously designed. People who has to carry out it must be prepared and trained to do it. You should take into account all you need to carry out the plan to be ready when be needed.

You must evaluate the effects of your plan whether it is or not successful to be able to make all the necessary modifications. You remain flexible and open-minded.

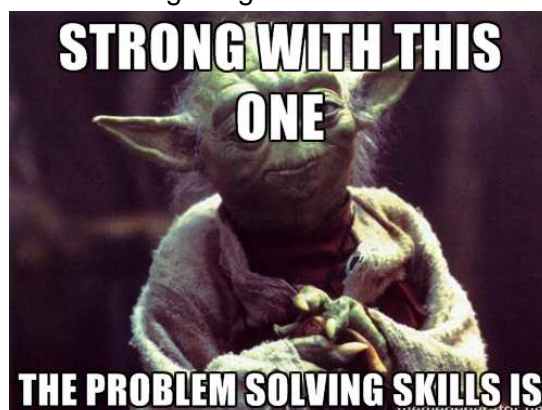
Working through this process it is easier than it seems but it requires practice. Sometimes if you have trouble selecting an option you should go back to the previous steps to think about it and be able to keep going.

This process can be used by one person, two or even al large group. It is very helpful when you faced a difficult decision. The more difficult and important the problem, the more helpful and necessary it is.

COMPETENCY AREAS OF "PROBLEM SOLVING":

Here we have some of the competency areas that can be considered part of "problem solving":

- Initiative: When a person takes action without being asked. You look for opportunities to make a difference.
- Creativity: Everybody is an original thinker and has the ability to go beyond traditional approaches.
- Resourcefulness: You are capable to adapt yourself to new, sometimes difficult, situations and find ways to overcome obstacles.
- Analytical thinking: Human can use logic and critical thinking to analyze a situation. We have survive until now thanks that.
- Determination: You must be persistent and do not give up easily.
- Result-oriented: Your focus is on getting to the desired outcome - solving the problem.



CHARACTERISTICS OF AWESOME PROBLEM SOLVER:

To be an awesome problem solver, first we need to start with the right attitude. I could be good to remain some of these characteristics to be able to read them as much as we need:

- Be open minded:

That means that the problem you have may be different to the problem you think you have. You must be flexible and be open to new ideas, opinions, points of view, a new start in a different direction. Sometimes your beliefs on anything and everything could be wrong.

- Be inquisitive:

Always be looking around and noticing things. Often, things which you don't suspect have anything to do with the problem you are trying to solve. Look for things that seem odd, anything missing or in the wrong place, etc.. These are often good starting places to find clues.

- Ask the right questions:

This is one of those things you get better as much as you practice. You must ask yourself or others if you are helping anybody else general questions to organize your ideas. Sometimes you get lost and you need to be more concentrated and the questions help you doing it. Some examples could be: "What is actually doing? How is it actually doing it? Why is it doing it?, etc..."

- Slow down:

When you are trying to solve a problem you have to slow down to understand and see all the options better. Slowing down can be very difficult but it makes a big difference. For instance, sometimes when a student explain a problem to a classmate he realize the solution in the middle of explanation because he slowed down to explain the problem. It is a good idea to leave a problem for one or two hours, even a day if you can and then when you come back you will surprise how easy it becomes.

- Do not be lazy:

You must read all the material because often the difference between something working or not is a little detail you have missed. Due to technology we have become lazy and we expect the computer, multimedia, etc... will come with the solution without having to do anything. You must do an effort to read, understand, analyze, etc.. and do all the steps to find the best solution.

- Do not panic:

When faced with a difficult problem most of us panic, it is a normal reaction but we must change our attitude and be calm and relax. We have to think that solutions are there waiting for us to discover them.

When you are calm you are able to think clearer and more creatively.

PREVIOUS EXPERIENCES USED IN PROBLEMS SOLVING:

We can find different problems and it is impossible for us to have a template to solve all of them because each one is different. There are small or big problems, irrelevant or important, short or longer, etc... That is the reason because we have to learn how to solve problems in general and then think in the problem we are trying to solve in concrete.

I would like to explain briefly an example of that:

- **EXAMPLE:** A maths teacher who wants to teach how to calculate an area to students. He has two options:
 - First one: teach every formula for every figure. They will learn how to use formulas.
 - Second one: teach how to break down figures in triangles and squares and then students only have to learn one formula or two and they will be able to calculate every figure. They will learn how to calculate areas.

In business or in life you can learn how to solve a problem by memorizing "the formula" which only goes for this problem or other exactly the same or learning few steps who prepare you to solve every kind of problem you can have in the future. How can you do this? It is based in your previous experience. Our brain is always looking in its files to find what we had learnt in the past to use it to current situations. If we had solved a similar problem the brain find it and use it, but if we hadn't solved any problem similar the brain look for what we had learn from past experiences and use it now.

It is said that elder are wiser than young people and the reason is they have more experiences archived in their brains than younger people. When they have to solve a problem, they can compare with millions of previous experiences throughout his life while young people sometimes don't have any experience at all. The solution isn't the same for elder people than for younger people. Young people has to learn how to solve problems first.

