

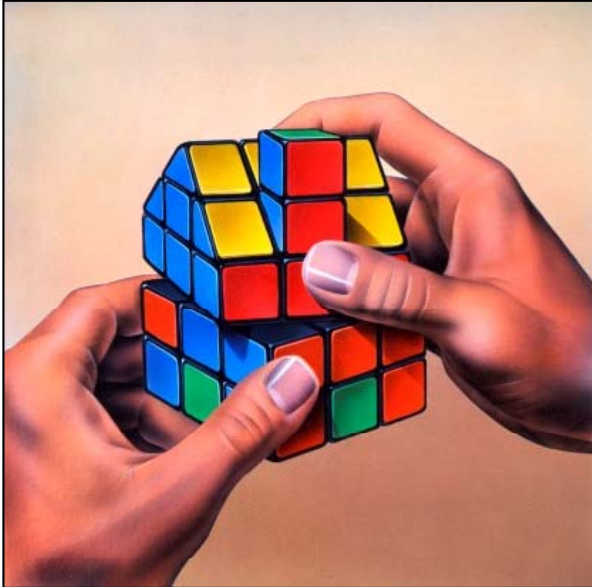
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَقَدْ رَبُّ زِدْنِي عِلْمًا

صدق الله العظيم



نقدر...؟ طبعاً نقدر



**Problem
Solving**

Omar El-Shenety

***Every Challenge is
an Opportunity !!!***

Success & Progress

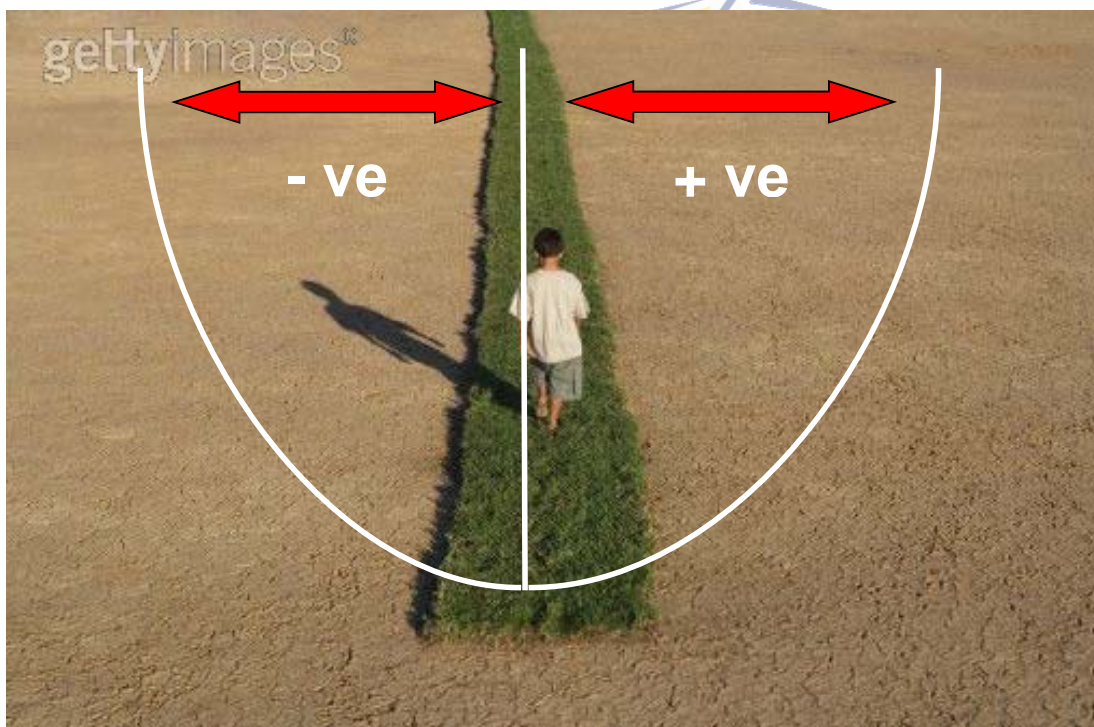


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We all have our
personal plans
and dream of
being successful
in our lives

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Normal Life Progress



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Problem Definition

- The **Gap** between **what you want** and **what is happening** is a **Problem** that needs to be solved
 - **Positive** Gap
 - **Negative** Gap
- The Problem results from **deviation** between your plans & expectations and the actual situation & facts

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Another Perspective



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Opportunity vs. Challenge

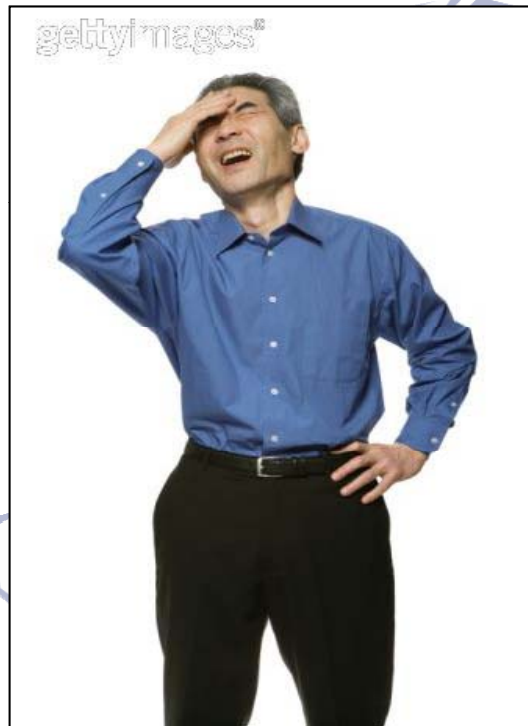


Handling the Problem

How to Handle the Arising Problem?



Panic & Shut Down



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Avoid the Situation



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Debate the Situation



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Face the Problem



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Let Agree that ...

- A problem is a **chance** for you to do your best
- The **best way to escape** from a problem is to solve it
- So let's agree to change it to an **opportunity**



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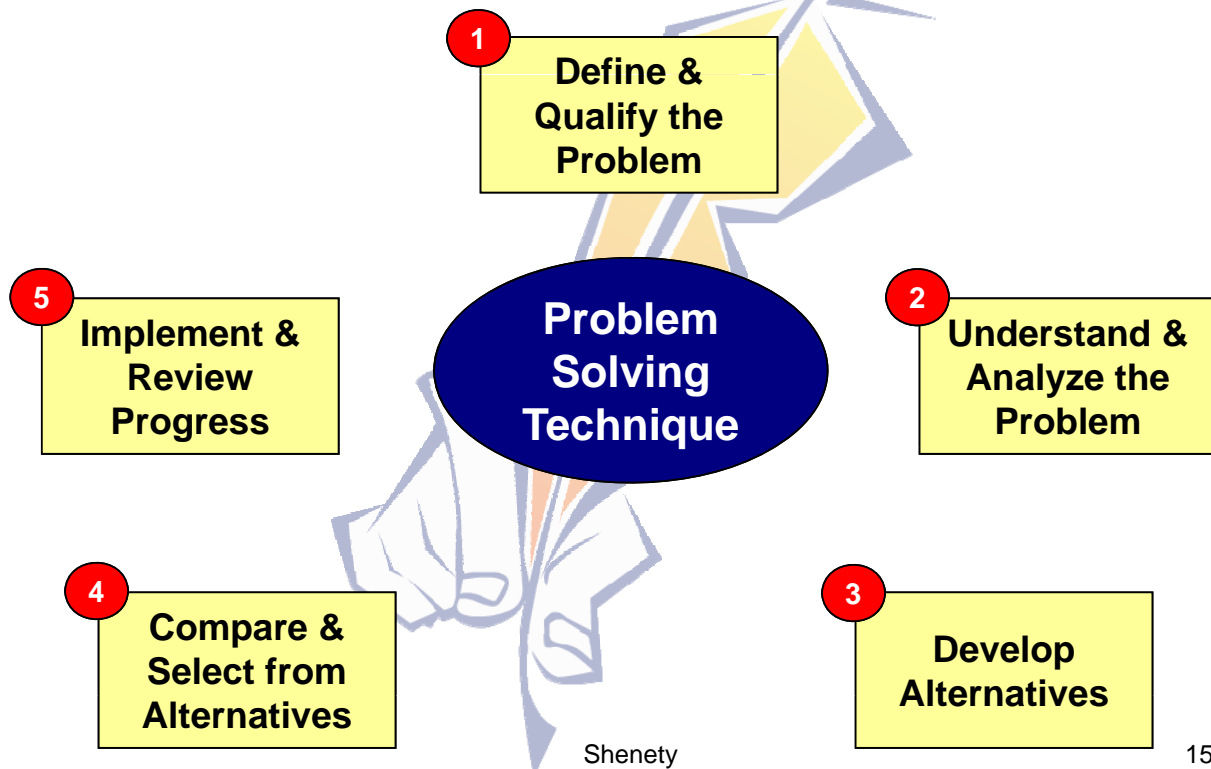
What is Problem Solving?

*A **process** in which we **observe** and **solve a gap** between a **present** situation and a **desired** goal*

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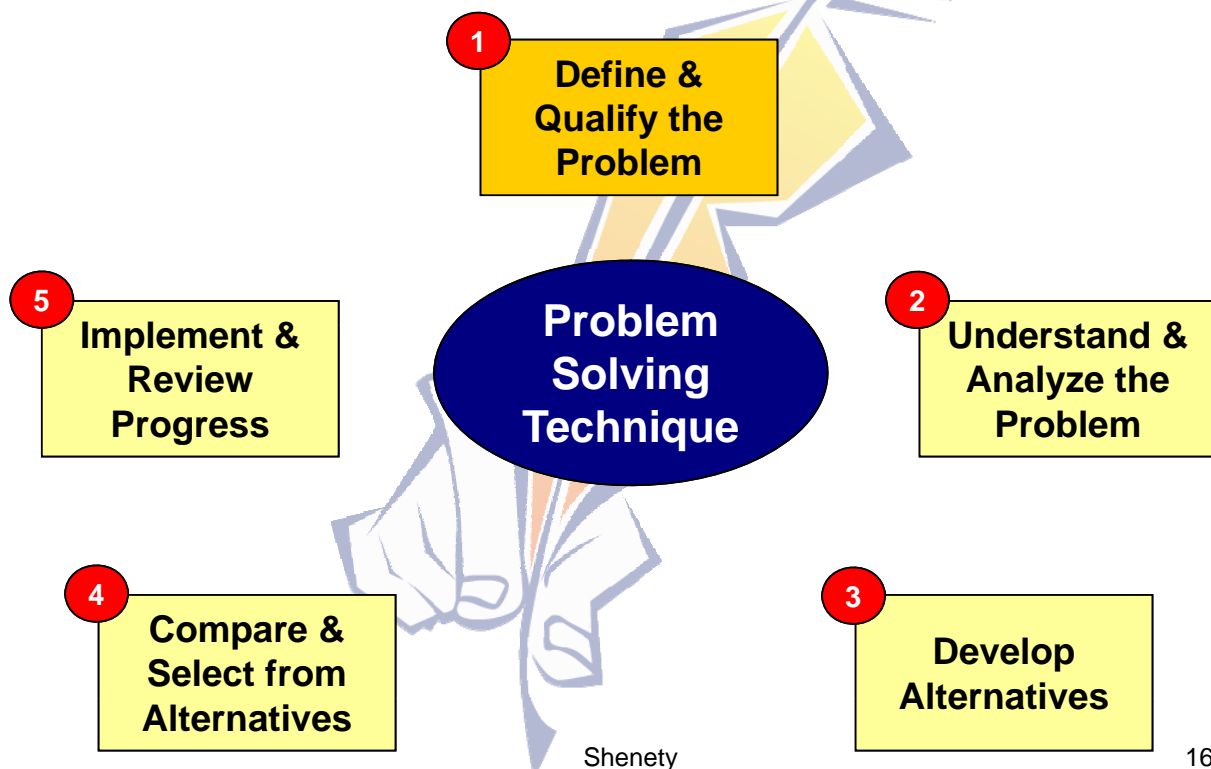
Problem Solving Technique



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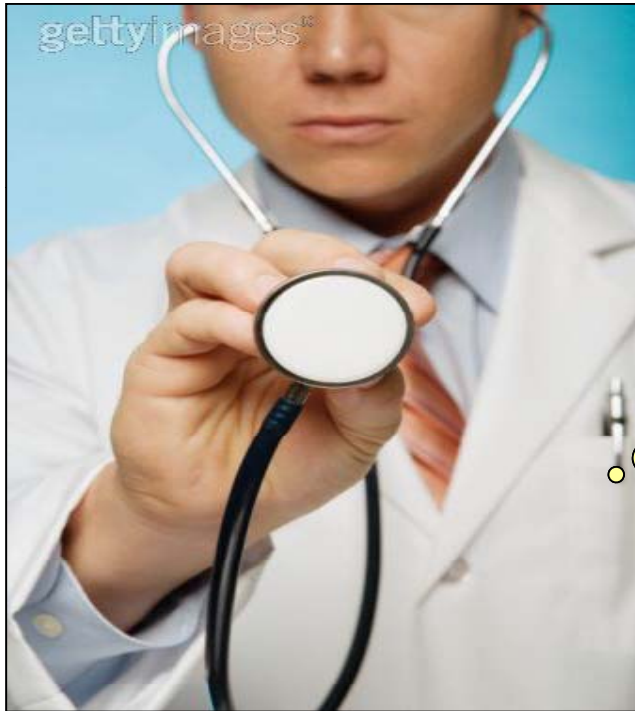
Define & Qualify the Problem



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Define & Qualify the Problem



Put your
hands on the
real problem!!!

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10 Questions to Consider?

- 1) **Why** is it a problem?
- 2) Is it **my problem** or someone else?
- 3) **Can I** solve it? Is it worth solving?
- 4) Does it need **immediate** solution. Or can it wait?
- 5) Is it **likely to go** away by it self?
- 6) Can I **risk ignoring** it?
- 7) Is this the **real** problem, or it is the **symptoms** of a larger one?
- 8) If this is an **old** problem, what's wrong with the **previous solution**?
- 9) Does the problem have **ethical** or **religious** dimensions?
- 10) Will the solution affect something that must **remain unchanged**?

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Remember that ...

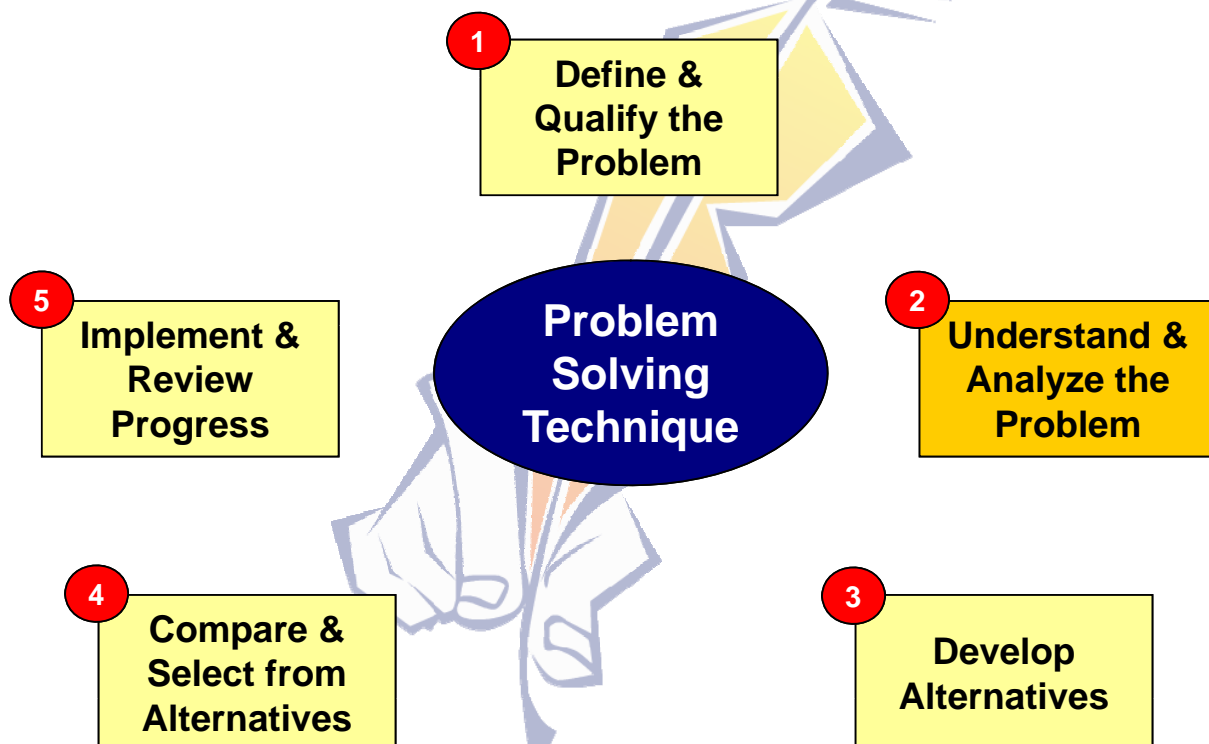
- “**50%** of the Solution lies in proper **diagnosis**” (*Consulting Practice*)
- “An **undefined** problem has an **infinite** number of solutions” (*Humphery*)
- “Ajaban le 7al el mo3men, amroh **koloho laho 7'er**” (*Hadith*)

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Understand & Analyze the Problem



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Understand & Analyze the Problem



Know what it
needs & think
it deeply!!!

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Technique to Follow

To **Understand**, you need to know:

- Facts and data
- Stakeholders
- Boundaries
- Opinions & assumptions

To **Analyze**, you need to:

- Look deeply into the data gathered and its **validity** and **suitability**
- Try to define the most **relevant** issues to your case
- **Consult** wise and knowledgeable people that you trust

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Remember that ...

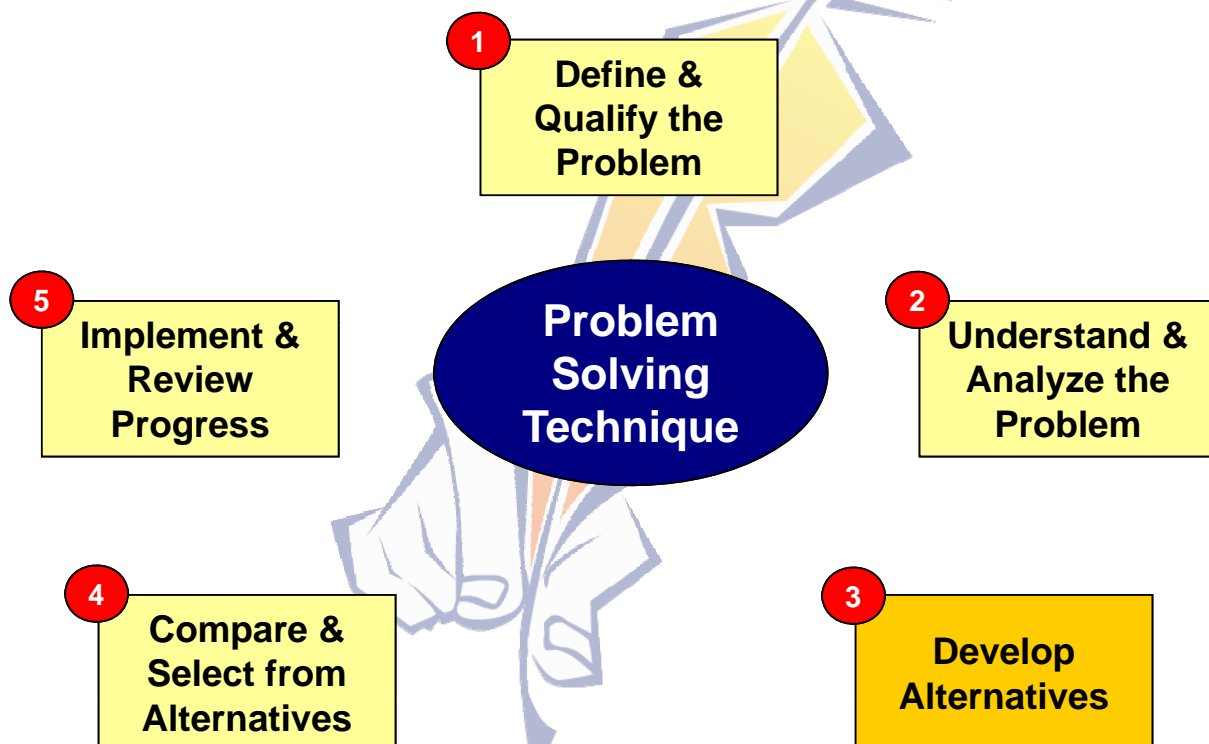
- “It's so **much easier** to suggest solutions when you **don't know too much** about the problem” (*Malcolm Forbes*)
- “Don't **tweak** facts towards your preference”
- “Focus on the **main issue** & avoid distraction by **side issues**”

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Develop Alternatives



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Develop Alternatives



Be creative & optimistic in developing solutions!!!

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Technique to Follow

- Start by listing all the **options** that have been **done before** or you learnt about them through research
- **Brainstorm** for new solutions and ideas
- **Combine** some solutions to develop stronger options
- **Consolidate** a whole list of options
- **Remove** all unrealistic options
- **Shortlist** into few options

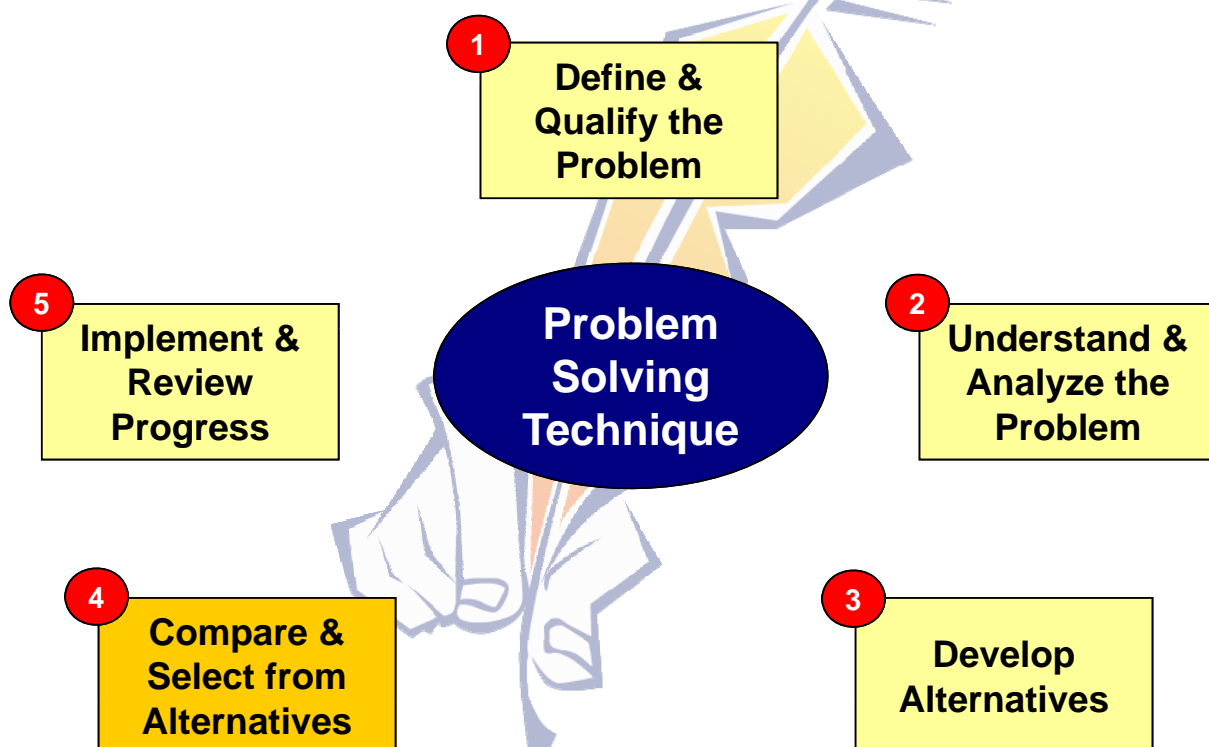
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Remember that ...

- “The greatest challenge to any thinker is stating the problem in a way that will **allow a solution**” (*Bertrand Russell*)
- “**Benchmarking** previous experiences & cases can be of great use”
- “Try to be extremely **creative** & avoid developing **similar** alternatives”

Compare & Select from Alternatives



Compare & Select from Alternatives

ANALYTICAL HIERARCHY MATRIX

	Alternatives				Row Sum	Rank
	A	B	C	D		
Alternative A		0	0	0	0	4th
Alternative B	1		0	1	2	2nd
Alternative C	1	1		1	3	1st
Alternative D	1	0	0		1	3rd

Be logical & consider all aspects!!!

3 Factors to Consider

1) Suitability

- Is ethical or practical? Is it appropriate in scale or importance? An adequate response? Too extreme?

2) Feasibility

- How many resources will be needed to solve the problem (i.e. Is it affordable?) How likely will it solve the problem?

3) Flexibility

- Is it flexible? Can it help respond to new uncertainties or consequences?

Technique to Follow

Factors	Suitability	Feasibility	Flexibility	Total	Rank
Option A	1	1	2	4	3
Option B	2	1	2	5	2
Option C	3	2	1	6	1

- 1) Construct the **comparison table**
- 2) **Rate** each option according to the 3 criteria on a scale from 1 to 3
- 3) Calculate the **total score** for the different options
- 4) **Rank** the different options according to their scores
- 5) **Select** the highest rank

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Remember that ...

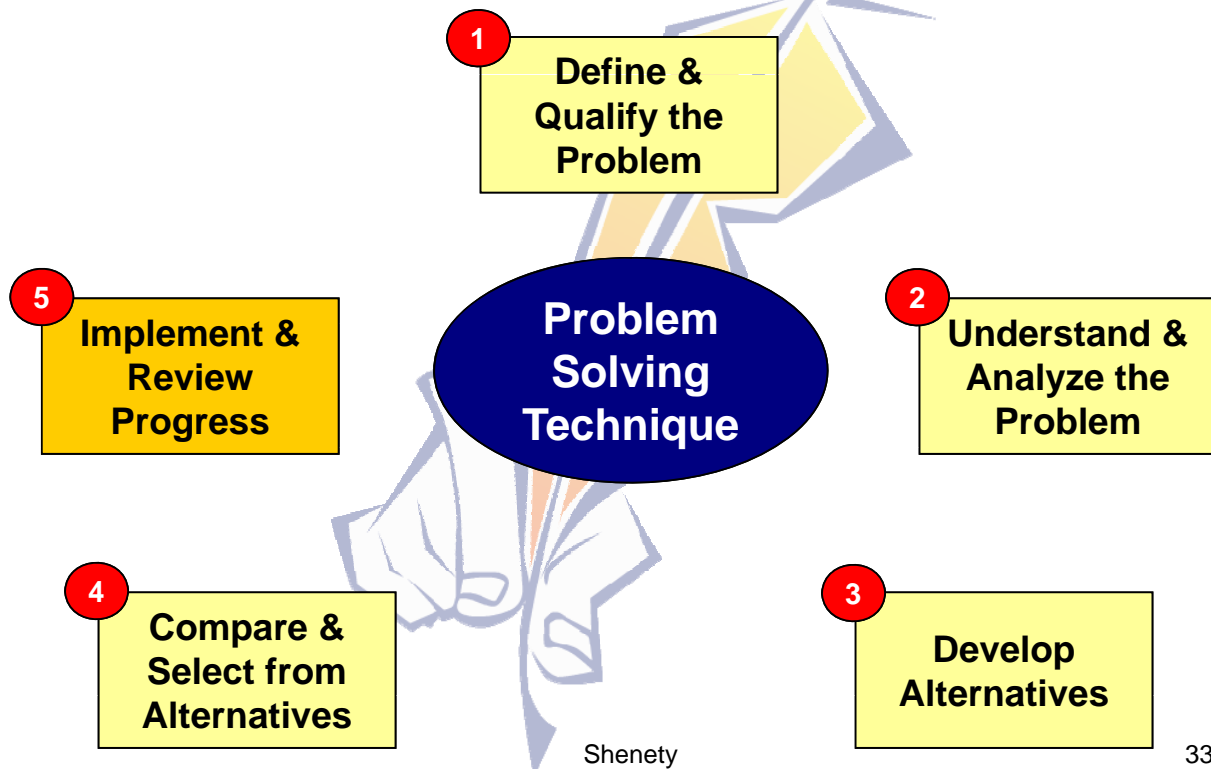
- Don't consider any option as "**Perfect Solution**"
- **Consider Your intuition**, or inner feelings in deciding on a solution
- **Return to your trusted outsider**, Is there something you missed? Does he/she see a problem with your solution?
- **Compromise**, Consider compromise when you have a full grasp of the problem

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Implement & Review Progress



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Implement & Review Progress



Keep an eye on
implementation
progress !!!

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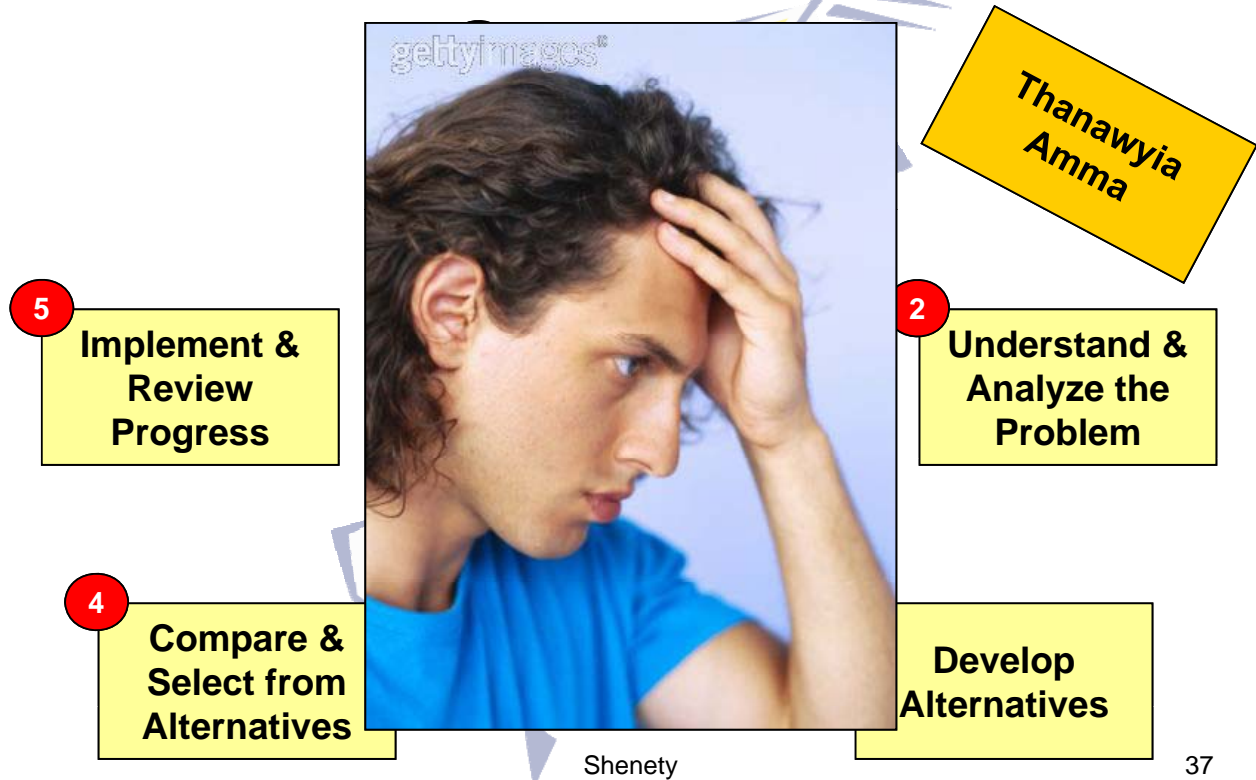
Technique to Follow

- Prepare a strong **action plan** for implementing your decision
- List some **key indicators** to follow up on progress
- Periodically **check the indicators** to review progress
- **Analyze** reasons for deviation
- **Change and adjust** action according to the situation

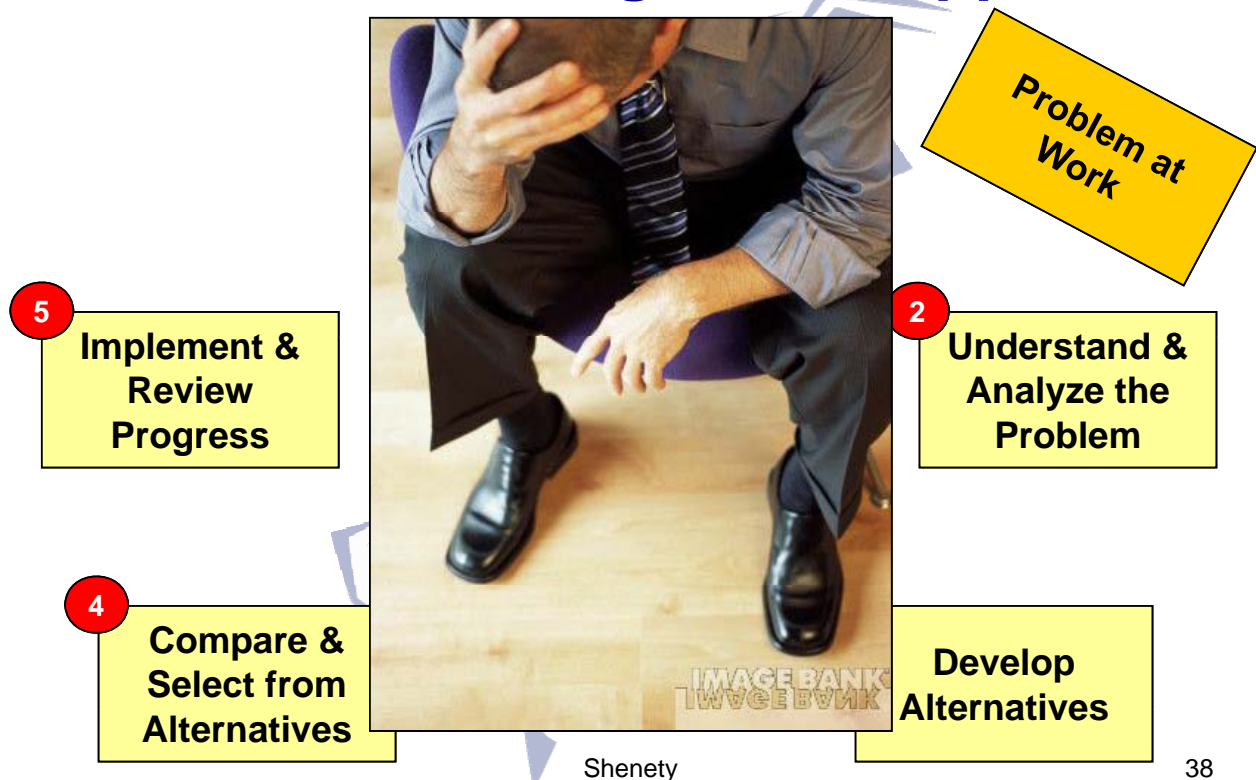
Remember that ...

- “Each problem that I solved **became a rule** which served afterwards to solve other problems” (*Rene Descartes*)
- “**Implementation** is as important as the design of the solution”
- “**Tawfiq Allah** is a great factor in solving any problem”

Problem Solving Cases Applied



Problem Solving Cases Applied



THANK YOU



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