

# CREATIVE THINKING & PROBLEM SOLVING

2

PAPER

3

TOPIC

## Define/Elaborate on the meaning of problem-solving and decision making.

**Problem Solving:** The process of gathering the facts that are necessary to overcome a specific challenge.

**Decision Making:** In this step the decision makers must consider various alternatives before deciding on the best one.

## Explain/Differentiate/Distinguish between problem-solving and decision making.

PROBLEM SOLVING	DECISION MAKING
Problems can be solved by a group or an individual team member. This makes problem solving more inclusive.	Decision making is often done by senior management this makes decision making more authoritative.
The group will identify various solutions and then critically evaluate each one.	The senior management will consider various alternatives before deciding on the best one.

## Identify/Name/Outline/Explain/Discuss the problem solving steps.

### Identify the problem

- Acknowledge that there is a problem before it can be solved

### Define the problem

- Define all the possible causes of the problem.

### Identify alternative solutions

- Decided what seems to be the best solutions to the problem.

### Evaluate alternative solutions

- Consider advantages and disadvantages of each alternative solution.

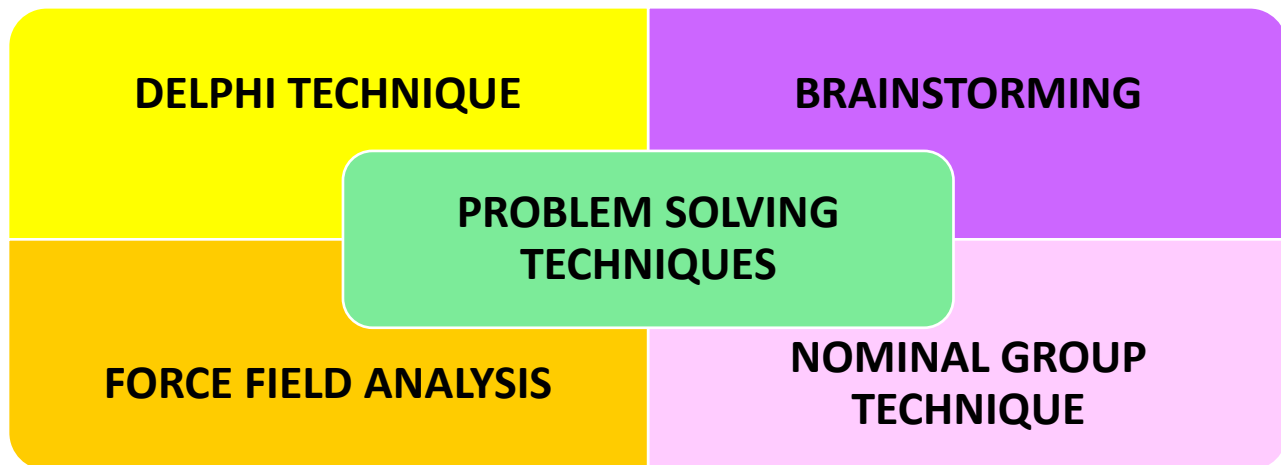
### Choose the best solution

- The best solution should match the size and the resources of the business.

*Apply the problem-solving steps from given scenarios/case studies.*

*Identify/Name the following problem-solving techniques from given scenarios/statements: Delphi technique, force field analysis, brainstorming, nominal group technique.*

## PROBLEM SOLVING TECHNIQUES



### DELPHI TECHNIQUE

#### Ways in which a business can apply the Delph Technique (4)

- The business must invite a panel of experts to research the challenge/s it might be facing.
- Experts do not have to be in one place and will be contacted individually.
- The experts will then be requested to send individual responses to the questionnaire.
- The business then needs to summarise the responses from the experts using a feedback report.
- Finally, the business will summarise all the feedback from the experts in a report.
- After reaching a consensus, the business should then choose the best solution/proposal based on the report.

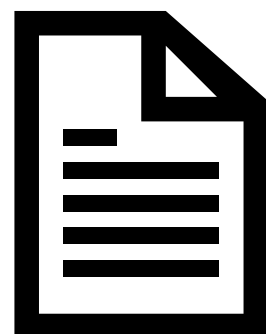
#### Impact of the Delphi Technique (4)

##### **Advantages / Positives**

- Information received from experts can be used to solve complex business problems.
- Experts may give honest, credible opinions because they do not have a direct or personal interest in the business.
- Conflict may be avoided especially if all experts are knowledgeable and well qualified.

##### **Disadvantages / Negatives**

- It is an expensive technique to use because of its high administrative costs.
- It may be time-consuming and complicated to analyse data received from experts, and to set new questionnaires.
- Not all experts are willing or interested to give feedback or to complete questionnaires.



## FORCE FIELD ANALYSIS

### Ways in which a business can apply the Force Field Analysis (4)

- Describe the current situation or problem and the desired situation and write it in the middle or on top for everyone to see.
- List all driving/pros and restraining/cons forces that will support and resist change.
- Allocate a score to each force using a numerical scale, where 1 is weak and 5 is strong.
- Weigh up the positives and negatives, then decide if the project is viable.
- Choose the force with the highest score as the solution.
- If the project is viable, find ways to increase the forces for change.
- Identify priorities and develop an action plan.

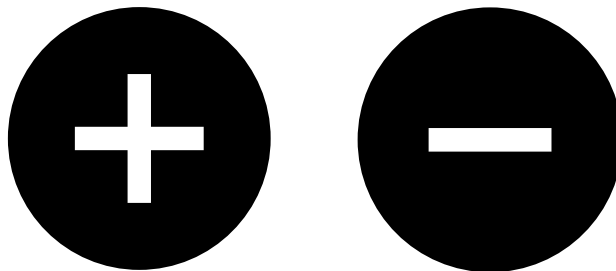
### Impact of the Force Field Analysis (4)

#### **Advantages / Positives**

- It provides a visual summary of all the factors supporting and opposing a particular idea.
- Employees feel included and are able to understand where the business is going.

#### **Disadvantages / Negatives**

- It is time-consuming since the business must stabilise before more/further changes can be made.
- Requires the participation of all business units



## BRAINSTORMING

### Ways in which a business can apply Brainstorming (4)

- The business must define the problem clearly so that all participants understand it.
- The group must set a time limit for each brainstorming session.
- People in the group must suggest ideas at random, and all ideas must be written on a flip chart or shared online during an e-brainstorming session.
- Each suggestion must be used to inspire new thoughts or ideas from other group members.
- The group leader must not allow anyone to judge or criticise any ideas. The goal is to generate as many ideas as possible.

### Impact of Brainstorming (4)

#### **Advantages / Positives**

- Productivity increases if the business generates ideas that use time and money more effectively.
- Employees are motivated as they are allowed to contribute to solving business problems.

#### **Disadvantages / Negatives**

- Some team members may dominate the discussion and influence other group members.
- Some employees fear criticism and this may prevent full participation in brainstorming sessions.



## NOMINAL GROUP TECHNIQUE

### Ways in which a business can apply the Nominal Group Technique (4)

- Encourage the group to define the problem so that all participants in the small group can work on the same problem.
- If the group is too big it must be split into smaller groups.
- Request each employee to silently brainstorm or generate as many ideas as possible on his/her own and write them down.
- All ideas are written down on a large paper or recorded electronically on a computer for all to see.
- Employees are then encouraged to ask clarity-seeking questions.
- Criticism of ideas will not be allowed because it will prevent others from participating in the process.
- The next step is to eliminate ideas any duplicate or similar ideas.

### Impact of the Nominal Group Technique (4)

#### **Advantages / Positives**

- It provides time to think about the question in silence before responding.
- Voting on the ideas is anonymous and may be more reliable/honest.

#### **Disadvantages / Negatives**

- It minimises discussion and thus does not allow the full development of ideas.
- Small groups limit participation and are pre-selected.
- It is time-consuming, as each member must make a presentation.



## CREATIVE THINKING

- Creative thinking is the ability to be innovative and come up with new ideas.

### **Explain/Recommend ways businesses can create an environment that promotes creative thinking in the workplace.**

- Encourage all staff members to develop new or unique ways of doing things.
- Always be willing and respond enthusiastically to new ideas from staff members.
- Train staff members on innovative techniques like mind mapping.
- Make sure the working environment is free from distractions like high noise levels.

### **Advantages of creative thinking in the workplace.**

- Better, unique and unconventional ideas and solutions are generated.
- Complex business problems may be solved.
- Improves motivation amongst staff members.
- Creativity may lead to new inventions which improve the general standard of living.

