

Decision Making and Problem Solving

Session 1

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Module Learning Outcomes

- Use, and critically evaluate, logical/systematic approaches to problem solving and decision making;
- Investigate, use and judge the appropriateness of other approaches aimed at overcoming identified weaknesses in the logical approach to decision making;
- Prepare, use and evaluate decision making models;
- Judge and manage the effects of risk and uncertainty when making decisions.

Assessment

- 20% Group Presentation – to be assessed by week 9, 20 mins, 3-5 members
- 80% Written Assignment 2400 words – May 2016
 - *With reference to a listed company describe a major decision/problem that they have had to recently address*

Introduce each other

- Name
- Background
- An important decision made
- How?
- Degree of 'success'

Typical Organizational Problems

- How to make more effective use of a manager's time
- How to improve a product's appeal to customers
- How to improve motivation amongst staff
- How to appeal to customers' wants and needs
- How to cut costs through more efficient/effective production methods
- How to identify new and profitable product-market opportunities
- How to get skilled and experience staff to stay with the company without paying them excessively high salaries

Creative problem solving for Managerial functions:

Planning

- Determining the mission of the organisation
- Determining the organisational objectives
- Identifying strengths, weaknesses, opportunities and threats
- Adjusting the organisation behaviour and strategies to competitors' strategies
- Deciding how to implement competitive strategies

Organizing

- Deciding what jobs need to be done within an organisational unit
- Deciding how various jobs within an organisational unit can be grouped together, etc.
- Deciding how much authority should be delegated to various organisational positions
- Determining how best to train people for their jobs

Leading

- Finding ways of increasing productivity in the workplace

Activity

- Take a few minutes to think of a few more

Controlling

- Deciding what systems of control are needed
- Setting standards
- Identifying why standards/objectives have not been achieved

Problem solving, Decision Making and Creativity

- *Decision making* is about deciding what action to take; it usually involves choice between options.
- The object of *problem solving* is usually a solution, answer or conclusion.
- The outcome of *creative thinking*, by contrast, is new ideas

Why is creativity in management important?

- The main problem in management, according to James March (1988), is that: 'Organisations face a large number of problems of about equal importance, but only a few solutions. Thus the chance of finding a solution to a particular problem is small.'
- In order to identify and so solve many of the problems that arise in business it is necessary to challenge the problem solving capabilities of those in charge.
- In many cases the creative process which is used to approach problems has to be restructured and redeveloped in order to produce new ideas and perspectives.

“We do not think as long as things run along smoothly for us. It is only when the routine is disrupted by the intrusion of a difficulty, obstacle or challenge that we are forced to stop drifting and to think what we are going to do.”

John Dewey

Acquiring creative problem solving skills

- **Fluency** – ability to produce many ideas (many of which may be fairly similar or have the same kind of theme)
- **Flexibility** – ability to produce a varied mix of ideas (none or few of which are similar or share the same kind of underlying theme)
- **Elaboration** – ability to add detail, depth, mixtures of viewpoints or perspectives
- **Originality** – uniqueness, novelty, newness, creativeness (new) or innovativeness (improvement of existing)

Creativity Class Exercise

- Think of a several uses, new uses or types of uses for the following:
 - Scrubbing brush
 - Empty Jam Jar
 - Crown corks- bottle covers

'CLICO'

- In groups of 4ish
- Discuss 'what went wrong?'
- Why?
- Could have been avoided? And How?

General Framework for Decision Making and Problem Solving

LOGIC

- System or model
- Step by step
- Approach 'proves' solution
- Constraints identified early
- Options eliminated early
- Constant review / rework
- Problem changes to fit solution?!

MAGIC

- Total problem in mind
- Review and learn about it
- Different viewpoints
- Consider options together
- Possible packages
- Feelings, judgement
- Experimentation, testing, playing
- Hopping around

Puzzle 1

1. There are five houses, each with a front door of a different colour, and inhabited by people of different nationalities, with different pets and drinks. Each person eats a different kind of food.

2. The Australian lives in the house with the red door.

3. The Italian owns the dog.

4. Coffee is drunk in the house with the green door.

5. The Ukrainian drinks tea.

6. The house with the green door is immediately to the right (your right) of the house with the ivory door.

7. The mushroom-eater owns snails.

8. Apples are eaten in the house with the yellow door.

9. Milk is drunk in the middle house.

10. The Norwegian lives in the first house on the left.

11. The person who eats onions lives in the house next to the person with the fox.

12. Apples are eaten in the house next to the house where the horse is kept.

13. The cake-eater drinks orange juice.

14. The Japanese eats bananas.

15. The Norwegian lives next to the house with the blue door.

Now, who drinks water and who owns the zebra?

For next week

- Have a read of handout 1 on website <http://www.samuellearning.org>
- Think whether ‘you are logical or magical problem solver?’
- If you were the CEO of your organization, how would you ensure the organisation remained competitive?