**Business Studies**

**Grade 12**

**Creative thinking and problem solving Notes**

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

**Decision making:**

* It is often done by one person/a member of senior management who makes it authoritarian.
* Various alternatives are considered before deciding on the best one.
* It is part of the problem solving cycle as decisions need to be taken in each step.

**Problem solving:**

* Problems can be solved by a group/ team or an individual team member.
* Alternative solutions are generated/ identified and critically evaluated.
* Process of analysing a situation to identify strategies to bring about change.

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

|  |  |
| --- | --- |
| **DECISION MAKING** | **PROBLEM SOLVING** |
| -It is often done by one person/a member of senior management who makes it authoritarian. | -Problems can be solved by a group/ team or an individual team member. |
| -Various alternatives are considered before deciding on the best one. | -Alternative solutions are generated/ identified and critically evaluated. |
| -It is part of the problem solving cycle as decisions need to be taken in each step. | -Process of analysing a situation to identify strategies to bring about change. |

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

**Identify the problem**

* Identify the exact problem
* Acknowledge that there is a problem

**Define the problem**

* The nature of the problem must be precise.
* Define the possible causes of the problem
* Gather as much information as possible to establish the cause of the problem.

**Identify alternative solutions**

* Identify all different possible solutions
* Decide on the cause

**Evaluate alternative solutions**

* Use critical evaluation and analytical skills to evaluate each solution.
* Consider the advantages and disadvantages of each alternative solution.

**Choose the best solution**

* Set criteria for the best solution, in terms of aspects such as time/cost/risk involved
* Identify which solution will be used
* The best solution should match the size and the resources of the business.
* If the solution is not appropriate, the business should go back to defining the problem.

**Formulate/Develop an action plan/strategy**

* Arrange the necessary resources and delegate tasks.
* Establish a time line for implementation and set deadlines

**Implement the action plan**

* Carry out the planned actions/solution.
* Communicate delegated tasks/deadlines to employees.

**Evaluate the solution/action plan**

* Assess whether the problem has been solved partially or entirely
* Monitor/test the solution/action plan/strategy continuously.
* If problems emerge, they must recognise and re-formulate the problem for improved solutions in the future.

**Identify/Name the following problem solving techniques from given scenarios/statements: Delphi technique; Force field analysis; Brainstorming; Nominal group technique**

**Explain/Advise businesses on how they can apply the above-stated problem-solving techniques to solve complex business problems.**

**Application of the Delphi technique**

* Businesses must invite a panel of experts to research the complaints from customers.
* Experts do not have to be in one place and will be contacted individually.
* Design a questionnaire consisting of questions on how to improve the quality of their products and distribute it to the panel members/experts.
* Request the panel to individually respond to the questionnaire/suggest improvements to the products and return it to the business
* Summarise the responses from the experts in a feedback report.
* Send the feedback report and a second set of questions/questionnaire based on the feedback report to the panel members.
* Request panel members to provide further input/ideas on how to improve the quality of products after they have studied the results/documentation.
* Distribute a third questionnaire based on previous feedback from the second round.
* Prepare a final summary/feedback report with all the methods to improve the quality of the business’s products
* The business should choose the best solution/proposal after reaching consensus.

**Application of Force-Field Analysis technique**

* Describe the current situation/problem and the desired situation.
* 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.

**Application of brainstorming technique**

* State/Define the business problem clearly, so that all participants/stake-holders

 understand the problem.

* Members state possible causes of the business problems.
* Set a time limit for each brainstorming session.
* Record/Write ideas down, where all participants can see it./Ideas may also be

 shared online during an E-brainstorming session.

* Use each suggestion, to inspire new thoughts/ideas.
* Do not judge/criticise/discuss the ideas, so that many ideas could be generated

 as quickly as possible.

* All members of the group randomly make suggestions.
* The group rates ideas according to its usefulness/success/difficulty/cost to

 implement.

* The group evaluates all ideas, and combines similar ones/draw up a refined list.
* Discuss a plan of action on how to implement the best ideas.

**Application of Nominal-group technique**

* Encourage group to clearly define the problem/to improve the quality of their products due to various complaints so that all the small groups can work on the same problem.
* The business must divide the employees into smaller groups.
* Request each employee to silently brainstorm /generate many ideas on his/her own, on how the quality of their paint can be improved and to write it down.
* Each employee in the small group has the opportunity to give one of his/her idea/solution with a short explanation.
* Appoint one employee to write the ideas/solutions on a large sheet of paper/ capture solutions electronically on computer for all to see.
* Allow each employee to give a second solution until all possible solutions have been recorded.
* Encourage employees to ask clarity seeking questions.
* Discourage criticism of ideas/solutions as this may prevent others from giving their solutions.
* The business must eliminate ideas that are duplicated/ similar.
* Each employee must read through all the suggestions and anonymously rate them giving the highest points for the best solution.√
* Collect the ratings and calculate total points.
* Small groups must present one solution to the large group that was deemed best according to the scores/votes in their small groups.

**Discuss/Evaluate/Analyse the impact (positives/advantages and/or negatives/ disadvantages) of the above-stated problem-solving techniques**

**Impact of Delphi technique**

**Positives/Advantages**

* Businesses may use a group of experts without bringing them together.
* The experts will give the business clear ideas/solutions on how to improve on

productivity/ profitability.

* Information received from experts can be used to solve complex business

problems.

* Experts may give honest/credible opinions as they do not have a direct/personal interest in the business.
* Conflict may be avoided especially if all employees are knowledgeable and well qualified.
* Dominating employees may not take over the process as they do not form part of the problem solving process.
* It reduces noise levels in an office environment since there is no group

discussion.

**AND/OR**

**Negatives/Disadvantages**

* It is an expensive technique to use due to high administrative costs.
* May be time consuming/complicated to analyse data received from experts.
* Not all experts are willing/interested to give feedback/complete questionnaires.
* Some experts might not have an in-depth knowledge of certain topics.
* Experts' suggestions may not be considered by some employees so consensus may not be reached.

**Impact of the Force-Field Analysis**

**Positives/Advantages**

* It provides a visual summary of all the various factors supporting and opposing a particular idea
* Employees feel included and understood.
* Employees develop and grow with the business.
* Informed decisions can be made as forces for and against are critically

 evaluated.

* Enables businesses to strengthen the driving forces and weaken the restraining forces.
* Businesses are able to have an idea of the timeline required and the requirements of additional resources.

**AND /OR**

**Negatives/Disadvantages**

* It is time consuming since the business must stabilise before more changes can be made.
* Requires the participation of all business units
* The analysis developed is entirely dependent upon the skill level and knowledge of the group working on the analysis.

**The impact of brainstorming**

**Positives/Advantages**

* Better solutions are developed through collective contributions.
* Combinations of ideas/improvements can be chosen after all the ideas have

 been written down.

* Employees are motivated as they are allowed to contribute to problem solving.
* Stimulates creative thinking in the workplace.
* People get ideas from others and build on them.

**AND/OR**

**Negatives/Disadvantages**

* Brainstorming is time consuming as all stakeholders/employees may generate too many ideas which can delay decision making.
* Some team members may dominate discussion.
* Fear of criticism may prevent full participation in brainstorming sessions.
* It may lead to 'group think'/some individuals may not give their opinions.
* Discussion may result in conflict due to differences in opinion

**The impact of the Nominal group technique**

**Positives/Advantages**

* It provides time to think about the question in silence before responding
* Each team member/director has a chance to participate without interference from other team members.
* Voting on the ideas is anonymous and may be more reliable/honest.
* Everyone in the group is given an opportunity to contribute to the discussion, while avoiding the likelihood of one person dominating the group process.
* Enables the group to generate and clarifies a large amount of ideas quickly, and democratically prioritises them.
* It encourages participants to confront issues through constructive problem solving
* Strong technique for preventing conformity to group pressure.

**AND/OR**

**Negatives/Disadvantages**

* It minimises discussion, and thus does not allow the full development of ideas.
* Ideas/Inputs made by members may not converge and cannot lead to the same solution(s).
* Suggestions may not be as creative as when a group throws ideas around.
* It is time consuming, as each member must make a presentation.
* It is hard to implement it effectively with large groups unless very carefully planned beforehand
* Requires extended advance preparation, which means that it cannot be a spontaneous technique
* Good ideas can be voted out because its potential cannot be developed further
* Small groups limit participation and are pre-selected.

**CREATIVE THINKING**

**Define/Elaborate on the meaning of creative thinking.**

* A way of looking at problems from a fresh perspective that leads to unusual solutions/ Thinking original/ Lateral thinking (outside of the box)

**Explain the benefits/advantages of creative thinking in the workplace.**

* Better/Unique/Unconventional ideas/solutions are generated.
* May give the business a competitive advantage if unusual/unique solutions/ ideas/strategies are implemented.
* Complex business problems may be solved.
* Productivity increases as management/employees may quickly generate multiple ideas which utilises time and money more effectively.
* Managers/Employees have more confidence as they can live up to their full potential.
* Managers will be better leaders as they will be able to handle/manage change(s) positively and creatively.
* Managers/Employees can develop a completely new outlook, which may be applied to any task(s) they may do.
* Leads to more positive attitudes as managers/employees feel that they have contributed towards problem solving.
* Improves motivation amongst staff members.
* Managers/Employees have a feeling of great accomplishment and they will not resist/obstruct the process once they solved a problem/contributed towards the success of the business.
* Management/employees may keep up with fast changing technology.
* Stimulates initiative from employees/managers, as they are continuously pushed out of their comfort zone.
* Creativity may lead to new inventions which improves the general standard of living.



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

* Emphasise the importance of creative thinking to ensure that all staff know that management want to hear their ideas.
* Encourage staff to come up with new ideas/opinions/solutions.
* Make time for brainstorming sessions to generate new ideas, e.g. regular workshops/ generate more ideas/build on one another's ideas.
* Place suggestion boxes around the workplace and keep communication channels open for new ideas.
* Train staff in innovative techniques/creative problem solving skills/mind-mapping/ lateral thinking.
* Encourage job swops within the organisation/studying how other businesses are doing things.
* Encourage alternative ways of working/doing things.

Respond enthusiastically to all ideas and never let anyone feel less important