

Certificate of Higher Education Applied Leadership and Management Outreach

**BMSK4014
Problem Solving and Decision Making**

Assignment Guide and FAQs

2023

Define a complex problem in the workplace, including its scope and impact

Key Points	Description
<i>Define a workplace problem</i>	Explain what the problem is. Q. What is a 'complex' problem? A. A definition of a complex problem is one with multiple potential solutions. Q. What is suitable for Level 4? A. Any problem that can be taken through this process in order to show that you have understood the principle. Q. How do we know if a problem is suitable? A. It is better to choose a simple problem than an over-complex one. Q. What criteria do we need to use to decide upon a suitable problem? A. There are no criteria as such. Once the process is understood it can be applied to any problem regardless of complexity, so students need to show that they understand the process. Define restrictions placed on the solution such as time, budget and resources. Define the difference between the actual situation and the desired situation Identify the owner – who is in charge of solving it?
<i>Define the scope</i>	Who is affected? How far does the problem reach?
<i>Define the impact</i>	How are they affected?

Analyse information on the identified problem, to help inform the decision making process

Key Points	Description
<i>Collect and analyse information about the problem</i>	Use techniques and tools such as: Brainstorming, Mind Mapping, 5 Whys or Root Cause Analysis to collect and analyse information relevant to the problem Q. What sort of information? A. Information that should be collected while using the above tools and techniques consists of: Cost, timeline, availability, feasibility, relevance. If constructing a mind map – all the information gathered in the map needs to be analysed to see what is relevant to the problem. Use Cause and Effect techniques such as Ishikawa (Fishbone) analysis to identify possible causes of the problem

Propose a range of alternative solutions to the problem

Key Points	Description
<i>Suggest a range of solutions to the problem</i>	List and describe solutions to the problem based on the information collected in 1.2 and taking into consideration the available resources. Are there any obstacles or barriers to any of the solutions? Q. How many solutions is a range? A. There are always two options to any problem. Do something and Do nothing. So a range would be 3 or more. If your car dies, you can do nothing, fix it, replace it with another car, replace it with a bike..... and so on. Q. How appropriate and realistic do the solutions need to be? A. Solutions need to be realistic and appropriate to the problem. Think SMART Objectives here.

Using a decision making technique, evaluate a range of solutions to identify the most appropriate option

Key Points	Description
<i>Use a recognised decision making technique</i>	Use techniques such as: Grid analysis and Cost benefit analysis
<i>Evaluate options</i>	Identify the best option based on the results shown in your decision making technique. Q. Is it necessarily the cheapest? A. Best option is BEST option, not the cheapest option. This is why you have to evaluate them. You get what you pay for, so cheap is not always good. Q. Is it ok for it not to be the cheapest if it is the most effective and this is fully explained? A. Sometimes the best option is actually a combination of two options that gets to be <u>cheap and quick</u> or <u>readily available and safe</u>. Explain why that option is the best.

Develop a detailed plan for implementing the solution

Key Points	Description
<i>Create an Action Plan for implementing your chosen solution.</i>	Use an Action Plan or Gantt chart to map out the steps of the implementation Who will do What by When and How? What does success look like? Q. Does the solution have to have already happened and is being reported upon or must it be for the future? A. Either is fine as long as the process is well explained. Bear in mind that It can be difficult to justify someone else's reasoning and choices if you choose to use a problem that was solved by <i>someone else in the past</i>. You are being assessed on following the process of problem solving and decision making <i>not the choice of the problem</i>.

Communicate the plan to relevant stakeholders

Key Points	Description
<i>Identify the stakeholders</i>	Who are your stakeholders? Why do they want to be kept informed?
<i>Design a communication plan</i>	An action plan of Who will you communicate with and When and How? What mode of communication will you use to communicate with the stakeholders?

Assess appropriate monitoring and review techniques to ensure successful implementation of solution

Key Points	Description
<i>Identify techniques for monitoring</i>	What techniques can you use for monitoring progress? Q. What are acceptable techniques? A. Gantt chart, action plan, communication plan.... All the tools already used. How will you know that objectives are being achieved on time to an acceptable standard? Q. What is an acceptable standard? A. This is the standard set by the organisation that has encountered the problem. Is it more important that solution is cheap or safe or immediately implemented? Q. How do we monitor progress effectively? A. This section is about monitoring progress (monitoring implementation) so the question it needs to answer is: • How will you know that everything is going to plan and people are doing what they are supposed to be doing within the time they are supposed to be doing it in? • Basically you will look at the plan (Gantt chart or action plan) and compare it to the reality. • If the plan says: paint the wall and the reality is: you haven't even ordered bricks to build it yet This is why you have to monitor progress every step. It's easier to fix if you catch it sooner rather than later. • Build in suitable 'milestones' to check whether the project is 'going to plan' and how you can bring it back on track in the event of slippage.