Varun Khadayate A016

Screening Methods and Intensive Methods

Screening Methods:

Definition:

Screening methods are a type of problem-solving approach that are used to quickly identify a large number of potential solutions to a problem, with the goal of reducing the number of possibilities to a manageable number.

Types of Screening Methods:

- Filter screening: This type of screening method uses a set of predefined criteria to eliminate potential solutions that do not meet the required standards.
- Preliminary screening: This type of screening method is used to quickly evaluate a large number of potential solutions, based on a limited set of criteria, with the goal of reducing the number of possibilities to a smaller set of options.
- Feasibility screening: This type of screening method is used to determine the feasibility of potential solutions, based on factors such as cost, benefits, risks, and technical requirements.

Advantages:

- Quick and easy: Screening methods are typically fast and simple, and can be applied to a large number of potential solutions in a short period of time.
- Inexpensive: Screening methods are usually less expensive than intensive methods, making them more accessible to organizations with limited resources.
- Good for initial assessment: Screening methods are a good way to get a broad overview of the potential solutions to a problem, and can help to identify the most promising options for further evaluation.

Disadvantages:

- Lack of accuracy: Screening methods are not as accurate as intensive methods, and may miss important information that would only be revealed through a more in-depth evaluation.
- Limited criteria: Screening methods are typically based on a limited number of criteria, and may not take into account all of the factors that could influence the decision-making process.
- Risk of premature elimination: Screening methods can sometimes lead to the elimination of promising options too early in the evaluation process, which could limit the overall effectiveness of the solution.

Intensive Methods:

Definition:

Intensive methods are a type of problem-solving approach that are designed to provide a more in-depth evaluation of a smaller number of possibilities. These methods are typically more time-consuming, complex, and expensive, but they are more accurate than screening methods.

Types of Intensive Methods:

- Cost-benefit analysis: This type of intensive method is used to evaluate the costs and benefits of potential solutions, in order to determine the most cost-effective option.
- Risk analysis: This type of intensive method is used to evaluate the risks associated with potential solutions, in order to determine the best option in terms of risk management.
- Feasibility study: This type of intensive method is used to determine the feasibility of potential solutions, based on factors such as technical

Advantages:

- High accuracy: Intensive methods provide a more detailed evaluation of potential solutions, which leads to a higher level of accuracy in the results.
- Multiple criteria: Intensive methods take into account multiple criteria and trade-offs, such as cost, benefits, risks, and feasibility, which provides a more comprehensive view of the potential solutions.
- Better decision-making: Intensive methods provide a more thorough evaluation of potential solutions, which helps to ensure that the best solution is chosen.

Disadvantages:

- Time-consuming: Intensive methods are typically more time-consuming than screening methods, and can be a major barrier for organizations with limited resources.
- Complex and expensive: Intensive methods are often complex and expensive, which can make them less accessible to organizations with limited budgets.
- Limited number of solutions: Intensive methods are typically applied to a smaller number of solutions, which could limit the overall effectiveness of the solution if promising options have been prematurely eliminated through screening methods.