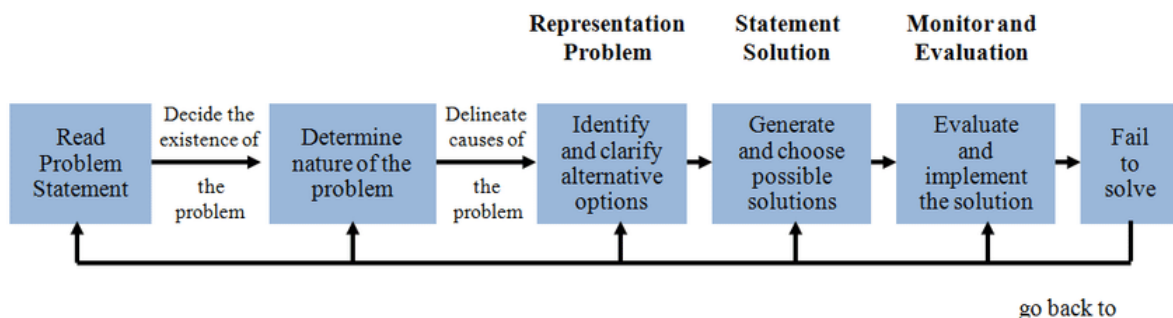# Why SE and SE Ethics

1 ISPs

ISPs are:

- Elusive, unbounded, no 'end' conditions, not understandable

- Require orientation (context)

- Many stakeholders

- Many 'solutions'

Not going to be asked about the difference between ISPs and wicked problems in exams by this lecturer at least

1.1 Solutions

- Generate your initial boundaries - these are mutable

- From the initial limits, decompose the problem into smaller problems

- Identify potential solution criteria for the sub-problems

- Feedback, consider and reframe

In SE a good problem solver need the following:

- **Method**: refers to a formal procedure; a formal "recipe" for accomplishing a goal that is typically independent of the tools used

- **Tool**: An instrument or automated system for accomplishing something in a better way

- **Procedure**: A combination of tools and techniques to produce a product

- **Paradigm**: A philosophy or approach for building a product

2 Stakeholders

- Customer: The company, organization, or person who pays for the software system

- Developer: The company, organization or person who is building the software system

- User: The person or people who will actually use the system

3   Where does the blame lie?

Four factors identified for a higher chance of success:

- User involvement

- Executive management support

- Clear requirement statements

- Proper planning

Three main factors identified in challenged or failed projects

- Incomplete requirements/changing requirements

- Lack of user involvement/input

- Lack of resources

4   SE Code of Ethics

Code of ethics is not a formal checklist or exhaustive

- To help us develop an understanding of what is appropriate

- Ethical rules and codes can only be used effectively by persons with good judgement

- Good judgement is acquired experience, good habits and conscious attention to ethical issues

- Exemplary software engineers have been described as having the following characteristics:

    - Strong sense of individual responsibility; acute awareness of the world around them; brutal honesty; resilience under pressure; heightened sense of fairness; attention to detail