SNS COLLEGE OF ENGINEERING

Kurumbapalayam(Po), Coimbatore – 641 107
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Department of Information Technology

Course Name – IT8075 Software Project Management

IV Year / VII Semester

Unit 5 – Staffing in Software Project

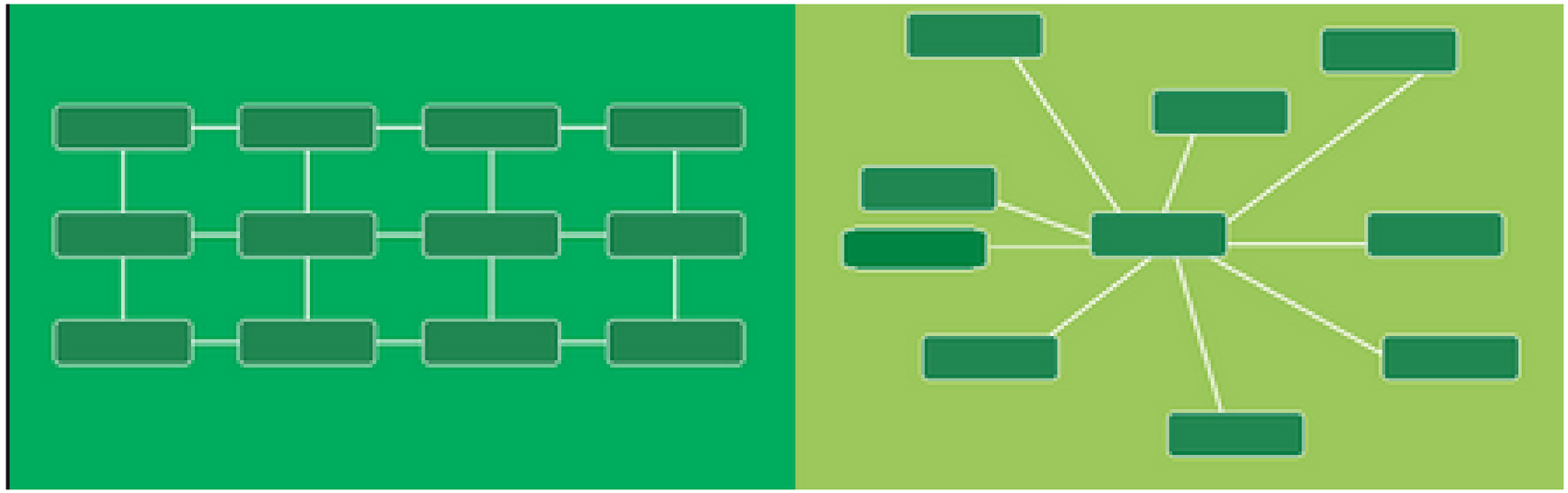
Topic 5 – Working in Teams – Decision Making

Decision Making

Decision making categorized as

- Structured
  - Simple routine decisions where rules can be applied straightforward

- Unstructured
  - Complex requires degree of creativity



Decision Making

Mental obstacles to good decision making

- Faulty heuristics or rules of thumb: useful but danger
  they are based only on information that is on hand, might misleading
  they are based on stereotypes

- Escalation of commitment:
  decision are difficult to alter even if evidence that is wrong

- Information overload
  too much information is not good

Decision Making

Group decision making - Meeting

- Project team composed of different specialist and decisions are made collectively.
- Groups are better at solving complex problems when members of group have complementary skills and expertise.
- Brainstorming good for poorly structured problems needing creative solutions.

Obstacles to good group decision group:

- Time consuming – stir up conflicts within group, decisions influenced by dominant personalities
- Conflicts – risky shift.

Decision Making

Measures to reduce disadvantages of group decision making
Delphi Technique

- Cooperation of a number of experts is enlisted
- Problem is presented to the experts
- Experts record their recommendation
- These recommendations are collated and reproduced
- Collected responses are recirculated
- Experts comment on the ideas of others and modify their recommendations
- If consensus reached stop the process.

Decision Making

Team heedfulness

- working as group helps to achieve success(Collective mind).
- Shared understanding, familiarity, good communication
- Examples : football team

Egoless Programming

- Programmers and programming team leaders should read each others programs.
- Peer code reviews

Decision Making

Chief programmer teams:
Larger the development group the slower it becomes because of increased communication.

Chief programmer teams
defines specification and designs ,codes , tests and documents the software.
– Co-pilot: whom the chief programmer can discuss problems and writes some
code for it.
– Editor: to write the documentation drafted by the chief programmer
– Program clerk: who maintains the actual code
– Example : New York Times data bank

Decision Making

Extreme Programming

- Promoting collective mind

- Traditional approach use documentation to improve communication and coordination.

In XP software code and test data are enhanced

- Code refactored – coding standards are followed
- Test cases and expected resulted are produced
- User representative to clarify user needs
- Integration test – fit between software components ensured
- Software development by pairs of developers

Decision Making

Scrum: comes from rugby scrums and the image of everyone pushing together in a common undertaking.

Scrum process:
– Starts with System architecture and planning phase
– Define the desired features of the products ,date of release of the product and priority

Sprints lasts for one and four weeks
– Tasks needed for implementation are listed
– Sprints carried out by groups(7 to 10 persons)
– Progress of sprint is marked by short meetings each day(15 minutes)
– Scrum meeting promote shared understanding in the group and helps to solve problem easily.
– When all sprints are completed a final closure phase

THANK YOU