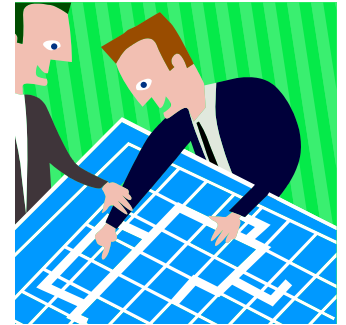
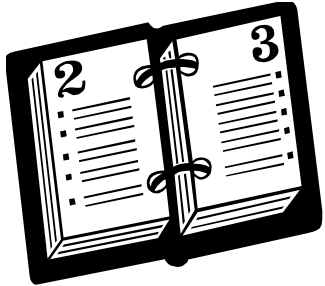




INFO5990 Professional Practice in IT

Lecture 01B



Teamwork & Leadership in the IT environment



By the end of this lecture you will be able to:

- Reflect on pressures existing in the IT world
- Understand the importance of team work
- Be more aware of team dynamics
- Appreciate some key issues in teamwork
- Suggest an optimum team size
- Understand what makes an effective leader
- Apply ideas to your own work in a team

Why are IT systems so hard to deal with?

(Frederick Brooks, 1987)

- “Software systems are complex compared with other human constructs of similar size”
- “Software comes under pressure because users devise new ways to use it”
- “Software systems are ‘invisible and **unvisualisable**’ compared with architectural & engineering constructs”



A teamwork approach is often employed in IT projects. Why?

- To cope with the sheer magnitude of IT projects
- To accomplish bigger and better things than is possible for an individual
- To exploit the special talents of individuals
- Because it is not feasible for individuals to have a sufficient range of skills



Benefits of team work?

- More cost-effective work processes
- Better use of workers' time and talents
- Improved decision making
- Improved communication process
- Reinforces technical and cooperative skills of members
- The team can achieve more than any one individual!
- Blame or glory shared by team?

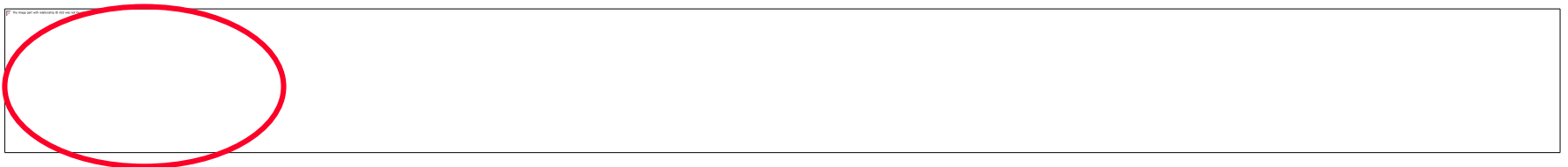




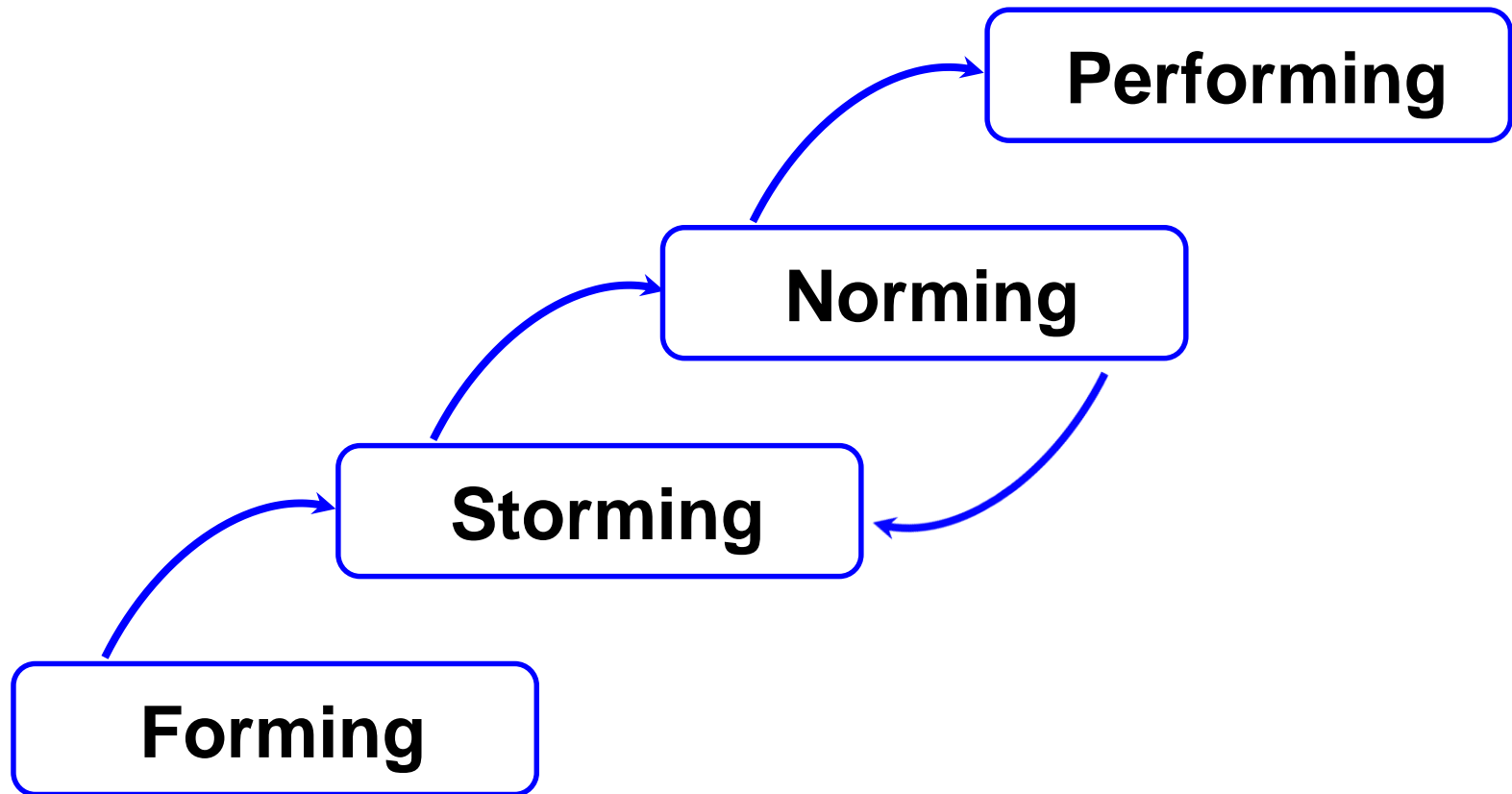
Question 1

Which of the following features is NOT generally seen as a benefit of team work

- (A) More cost-effective work processes
- (B) Better use of workers' time and talents
- (C) Improved decision making
- (D) More free time for team members
- (E) Team can achieve more than any one individual



Stages of team development



The Forming – Storming – Norming – Performing model of group development

- first proposed by Bruce Tuckman in 1965
- he maintained that these phases are all necessary and inevitable
- for the team to grow, to face up to challenges, to tackle problems, to find solutions, to plan work, and to deliver results.

Stage One: Forming

- Transition from individual to team status. Exploring the boundaries group behaviour. Time spent off task and some confusion.
- Team focus:
 - establish the norms of acceptable group behaviour
 - determine individual roles;
 - define the task and decide how it will be accomplished;
 - decide what information needs to be gathered;
 - communicate openly about individual likes and dislikes; and,
 - engage in team activities that build trust and communication.

Stage Two: Storming

- Members realize that the task is more difficult than imagined. Some members may reject the task. Fluctuations in attitude about team and chance of success. Communication poor - little listening. Disunity, tension and conflict. Minimal collaboration. Cliques appear.
- Team focus:
 - ensure forming stage issues are answered;
 - re-establish, clarify, or modify ground rules (norms);
 - negotiate roles and responsibilities; and,
 - listen, listen, listen.

Stage Three: Norming

- Members accept the team ground rules, roles. Relationships become more cooperative. Willingness to confront issues and solve problems. Members avoid conflict by negotiation. Evidence of sharing and team spirit. More time and energy to spend on the project . Significant progress is made.
- Team focus:
 - do detailed planning;
 - develop criteria for completion of goals;
 - build on positive norms and change unhealthy norms; and
 - encourage continued team spirit.

Stage Four: Performing

- Members have gained insight into personal and team processes. Understand each other's strengths and weaknesses. Can deal with conflict and resolve differences. Form close attachment to the team.

Team is now an effective, cohesive unit; can begin 'performing' its allotted task.

- Team focus:
 - emphasize quality work;
 - utilize each member's talents;
 - meet deadlines; and
 - continue to work on team commitment.

Final stage

- **Transforming:** The team is performing so well that members believe it is the most successful team they have experienced; **or**
- **Ending:** The team has completed its mission or purpose and it is time for team members to pursue other goals or projects.
- **But, of course:**
 - Not every team moves through these stages in order
 - Events such as adding a new team member can send the team back to earlier stages.
 - Time depends on experience and skills of team

Question 2

If members of a team realise the task is more difficult than they had imagined, are resistant to the task, have sharp fluctuations in attitude about the project's chance of success, with minimal collaboration we say the stage reached is:

- (A) forming
- (B) storming
- (C) norming
- (D) performing
- (E) It is impossible to tell



Question 3


If members of a team accept the team ground rules and roles, become more cooperative and willing to confront issues and solve problems, avoiding conflicts, we say the stage reached is:

- (A) forming
- (B) storming
- (C) norming
- (D) performing
- (E) It is impossible to tell



Question 4


According to Doug Putnam's empirical evidence, what can be said about the optimal size for a team developing a medium sized information system?

- (A) The best size is 5.
- (B) Size doesn't matter
- (C) The optimal size is 5-7
-  (D) The optimal size is 3-7
- (E) The size depends on the project complexity



Question 5

In Putnam's research, a "medium sized information system" is one that

- (A) Employs a team of 5 - 7 people
- (B) Contains less than 100,000 SLOC
- (C) Incorporated less than 500 objects
-  (D) Contains 35,000 - 95,000 new or modified SLOC
- (E) Occupies less than 400 - 500 MB code



The nature of leadership

What does a leader do?

What makes a good team leader?

Leadership issues

- “leadership is a process, not a position”
(Hughes et al, 2005)
- Consider people you have met, whom do you see as ‘leaders’? .
 - What characteristics do they have in common?
 - Are they all the same?
 - Could you display those characteristics?

Leadership, Richard Hughes, Robert Ginnett, Gordon Curphy (2005) McGraw-Hill

What does the team leader do?

- Define goals and set firm dates
- Organize resources to maximize performance
- Guide individuals towards those goals
- Facilitate team problem solving
- Facilitate cooperation
- Resolve conflict

Give me examples !

Leaders from around the world





What makes a leader successful?

Attributes observed in successful leaders

- Ability to build and lead their team
- Ability to develop or adapt to change
- Ability to establish collaborative relationships
- Non-authoritarian
- Consistent exceptional performance, predictable
- Ambitious

Attributes of leaders who became 'derailed' and failed to fulfil their promise

- Failed to build or lead their team
- Inability to develop or adapt to change
- Poor working relationships with colleagues
- Over authoritarian
- Inconsistent performance, unpredictable
- Over ambitious

Are leaders born or made?

Myths that hinder leadership development*

- *Myth 1: Good Leadership Is All Common Sense*
 - Studies of leadership reported tend to confirm what anyone with common sense 'already knows'
- *Myth 2: Leaders Are Born, Not Made*
 - Each person needs to make the most of leadership opportunities he or she faces.
- *Myth 3: The Only School You Learn Leadership from Is the School of Hard Knocks*
 - A course in leadership can help you to analyze your experiences from multiple perspectives – but !

*Hughes, Ginnett and Curphy, *Organizational Leadership*, (2005) McGraw-Hill Primis, 5e
<http://www.scribd.com/doc/26292606/Organizational-Leadership>

How to recognise a team that is not 'working'

An ineffective team often displays the following characteristics (Lechner, 2003)

- High level of negativity and passivity
- Quick (and 'dirty') problem solving; lack of clarity about what problem is
- Lot of win-lose situations among members
- Strangled information flow; dominance by one or two members; power plays
- Mistaking silence for support

Anat Lechner, (2003) Stern School of Business

http://sydney.edu.au/engineering/it/~isys3207/readingsontteams/groupsb2351_lechner.pdf

Scenario

Toby has missed three out of six meetings so far held and seems to have contributed very little to the team effort.

All other team members feel they would like to get rid of him.

As team leader, what would you do?

Dealing with freeloaders

What would you do?


- 'Sideline' them so that they can't do any harm.
- Complain to your tutor or the course coordinator.
- Get the rest of the team to gang up on them.
- Keep on their case until they do the job.
- Who has encountered similar problems in the workforce when working in a team?

Adopting a positive approach

- Discover each team member's particular talents
- Exploit existing talents to the benefit of the team
- Allocate tasks fairly and sensitively
- Do not expect every one to contribute equally. *'Vive la difference'!*
- Keep your cool

Question 6

If a member of a team appears to be a 'free loader' that is, someone who contributes little or no effort, but is happy to accept the team mark, the best way to deal with them is

- (A) to sideline them so that they can do no further harm
- (B) to notify the unit coordinator so that they do not receive the credit
- (C) to encourage the whole team to ostracise the free loader
-  (D) to find out what they are good at, and exploit their talents
- (E) BOTH (A) and (B)

Enjoy your team experience



Enjoy cooperative learning
Accomplish 'the impossible'
Benefit from support provided
Make new friends

... and if your team doesn't work?



- Being in a problem team can be an even more valuable experience than being in a good one
- The important thing is to analyse the situation and to find the cause
- One must “learn to fail intelligently, for failing is one of the greatest arts in life”.*

*Charles Franklin Kettering (b.1876 – d.1958)
American inventor, engineer, businessman; holder of 186 patents

How about this for teamwork!

<http://www.youtube.com/watch?v=I2HqW-AAAb20>

Example of team work !

What factors led to success in the
“*two hour house*” project?

For next week

- Remember Tutorial discussions /
remember one-one tutor discussions !
- Read articles
- Form/finilize teams in tutorials
- Select your group assignment topic

See you next week