Comp8081
Management Issues in Software Engineering

Donna Turner

Agenda

- Attendance

- Assignment 2 presentations: Groups 7, 8, 9

- Review: Introduction to Type in **Organizations**

- Motivation (McConnell Chapter 11)

- Summary, and Next Week

Assignment 2 Presentations

Groups 7, 8, 9

Review

Introduction to Type
in Organizations

Myers-Briggs Type Indicator (MBTI)

Energy (E-I)

- Extraversion
  - Action over reflection
- Introversion
  - Reflection over action

Decisions (T-F)

- Thinking
  - Logical & objective
- Feeling
  - Values & empathy

Taking Information (S-N)

- Sensing
  - Practical & tangible
- Intuition
  - Connections & possibilitieis

Living (J-P)

- Judging
 - Structured & methodical
- Perceiving
  - Spontaneity & flexibility

Team Composition

What you may observe…

- The more *similarity* between individual Types the sooner *rapport* & *trust* is established.
- Groups of very *similar* Types will reach decisions more *quickly*.

- Groups with many *different* Types will reach decisions more *slowly*, but may make better decisions.
- *Diverse* teams have been positively correlated with performance.

- Team members will 'stand out' if they are the only *one* representing a certain type of preference (e.g. the only 'I' on a team). ⌞SEP⌟
- Teams that come to *appreciate* and use different types may experience less conflict & be more *effective*.

- Teams that are 'one sided' (few different types) will succeed if they use different types *outside* the team as resources or if they make the effort to use their own less-developed functions as required by the tasks.

Problem Solving and Change

Zig-Zag Model of Problem Solving
(Perception Then Decision)

Perception

S → N

Decisions

T → F
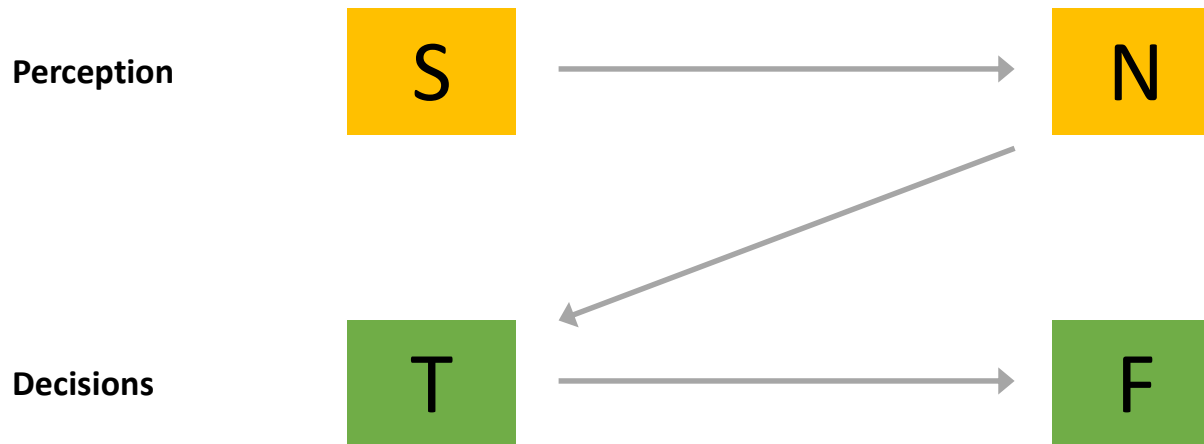
Conflict and Stress Management

Tips to Keep in Mind

DO:
- ❏ Validate the concerns expressed
- ❏ Try to understand the point of view described
- ❏ Promise to think about, discuss with others, and see what you can find out about the issue
- ❏ Promise to meet and discuss the issue at a specific time

DON'T:
- ❏ Try to reason with them
- ❏ Contradict them
- ❏ Defend yourself against accusations
- ❏ Minimize or dismiss concerns expressed
- ❏ Make fun of anything

Communications

When presenting to, influencing, explaining to, or trying to understand someone with the following preferences:

Sensing
- Be factual
- Document successful applications
- Reduce risk factors
- Work out details in advance

Intuition
- Give the global scheme
- Don't let opportunity pass
- Be confident and enthusiastic
- Indicates challenges
- Point out future benefits

Thinking
- Be logical
- State principles involved
- Stress competent handling of issue
- Be well-organized
- List the costs and benefits

Feeling
- Mention other proponents
- Be personable and friendly
- Indicate how it is helpful
- Tell why it's valuable
- Show how it supports personal goals

Use MBTI with caution:

- Should not be used to label/stereotype people, for selection decision or to assign work
- Not the answer to everything
- May explain some human behavior but not all
- ***Your type is never an excuse for not doing your work/job***
- ***Your type is never an excuse for not getting along with others***

Motivation

McConnell Chapter 11

People

Process

Development Speed

Product

Technology
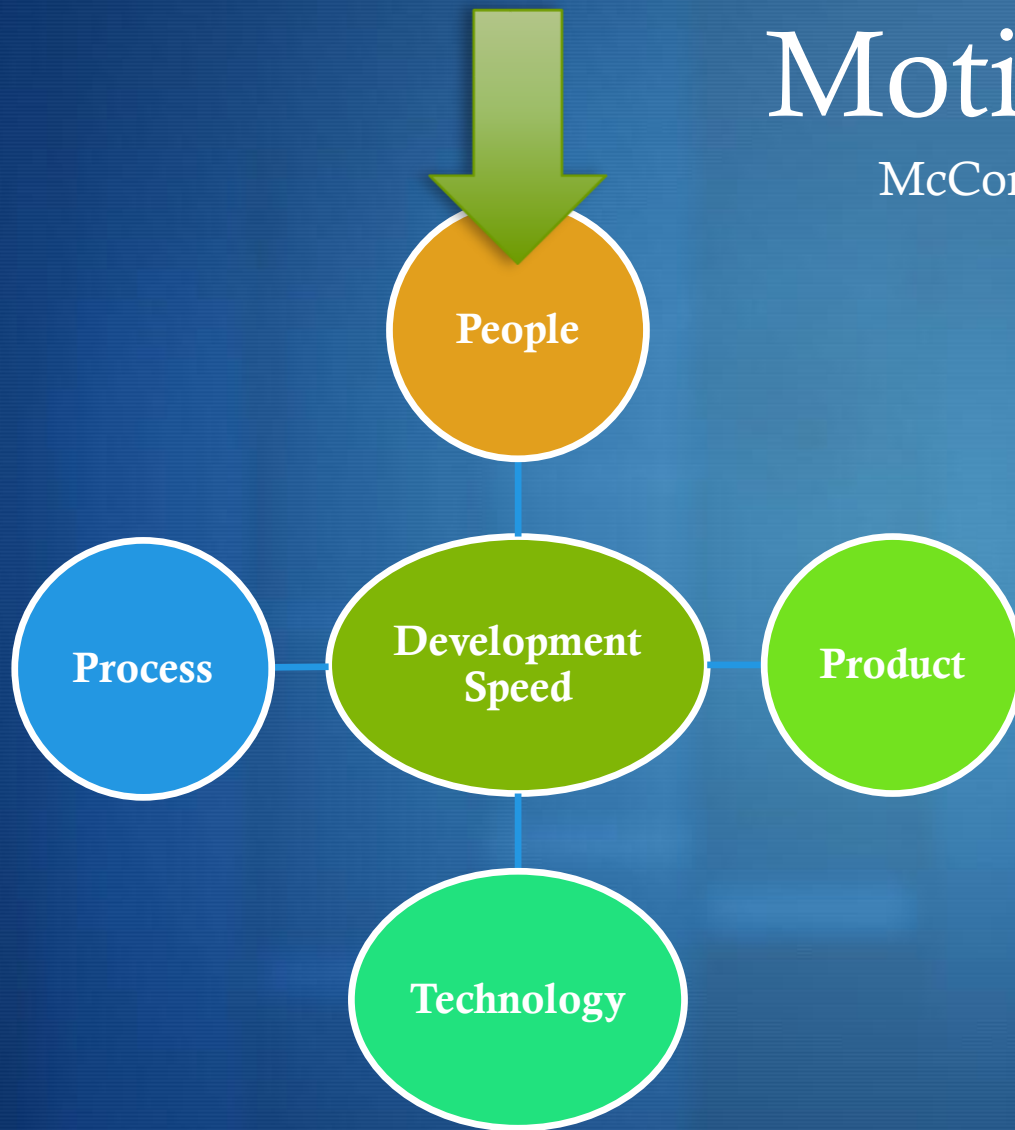
Two Questions

How are you going to choose your first (next) job?

Why did you enroll in the B.Tech?

Motivation

Some questions to start

- What do we mean by "motivation"?

- Where does it come from?

- Can you give "it" to, or take it away from someone else?

- Can you create it in yourself when it's not there? How? Why not?

- What is the most effective motivator and demotivator?

Dan Pink on Motivation

https://www.ted.com/talks/dan_pink_on_motivation?language=en

- What are his main points?

- What "resonates" or is surprising to you?

- Do you agree, or not? Why, or why not?

Main points from the video

Engagement:

- Rewards Work for Focused/Straightforward Work (20th Century Work)

- Self Direction Works Better for Creative Work (21st Century Work)

Three Building Blocks of Motivation:

1. Autonomy – urge to direct our own lives

2. Mastery – desire to get better and better at something that matters

3. Purpose – yearning to work in the service of something larger than ourselves

Motivation Considerations

- What difference does motivation make?
  - Any examples?

- What can you apply from the topics we discussed for MBTI?

- Why consider motivation in our context?
  - How is motivation manifested in our work?
  - Why does it matter to a company? To a team?

- What is the connection between employee motivation and team or company performance?

- Is employee motivation a cause of or just correlated with company or team success?

- If we assume a causal relationship – which factor(s) have the greatest impact in determining motivation?

Top 5 "Developer" Motivation Factors

Achievement	Growth Opportunities	The Work Itself	Personal Life	Technical-Supervision
• Ownership • Goal-setting	• Tuition/PD coverage • PD time • Projects that provide learning opportunities • Mentorship – to be mentored	• Skill variety • Task identity • Task significance • Autonomy • Feedback • Low friction on admin	• We might now call this "work-life balance"	• Provide opportunities to be a technical lead • For a product or for process area • Mentoring – to be a mentor

When you look at this list, can you translate it into: Autonomy - Mastery – Purpose?

McConnell, p.252

Comparison of Selected Top Motivators

"Programmer Analyst"

1. Achievement

2. Growth Opportunities

3. Work Itself

4. Personal Life

5. Technical-Supervision Opportunities

Managers of Programmers

1. Responsibility

2. Achievement

3. Work Itself

4. Recognition

5. Growth Opportunities

What do you think of these lists?

McConnell, p.252

Employee Engagement definition

- "a person who is fully involved in, and enthusiastic about, his or her work."
  - *What Engages Employees the Most OR, the Ten Cs of Employee Engagement*
  - Dan Crim and Gerard Seijts
  - Ivey Business Journal, April 2006
  - http://iveybusinessjournal.com/publication/what-engages-employees-the-most-or-the-ten-cs-of-employee-engagement/

Employee Engagement Factors

Employee Engagement Molinaro & Weiss, 2005	McConnell, 1996 Based on Boehm, 1981	"The Work Itself" Hackman & Oldham, 1980
Being part of a winning organization	Achievement	Skill variety
Working for admired leaders	Growth opportunities	Task identity
Having positive working relationships	The work itself	Task significance
Doing meaningful work	Personal life	Autonomy
Recognition and appreciation	Technical supervision	Feedback
Living a balanced life		

Atlassian

What do we know about Atlassian?

- Watch this video from [Atlassian](#)

- How many of the Motivation Factors and elements in Creating a High Performance Team do you find?

- Would you want to work there?

- [Why](#) does [Atlassian](#) do these things?

- What's the [latest](#)?

Case Study

Discuss this Video!

- Do you know [Kimberly-Clarke](#)?

- What do you think?

- How many of the practices that we have discussed so far can you identify from the video?

- Does it make you think that KC might be a company you would want to work for?

Top 5 "Developer" Motivation Factors

Achievement	Growth Opportunities	The Work Itself	Personal Life	Technical-Supervision
• Ownership • Goal-setting	• Tuition/PD coverage • PD time • Projects that provide learning opportunities • Mentorship – to be mentored	• Skill variety • Task identity • Task significance • Autonomy • Feedback • Low friction on admin	• We might now call this "work-life balance"	• Provide opportunities to be a technical lead • For a product or for process area • Mentoring – to be a mentor

Revisiting this list
(i) what factor(s) is motivating for you, and
(ii) which factors are controlled by you, or
(iii) controlled by the organization you work for?

De-Motivators

Herzberg's Two Factor Theory of Hygiene and Motivation

| Staff is dissatisfied and unmotivated | Hygiene factors → | Staff is satisfied but unmotivated | Motivational factors → |

- Hygiene factors
  - Safe work environment
  - Appropriate lighting, heating, and air conditioning
  - Adequate desk and shelf space
  - Readily available office supplies
  - Adequate equipment, communications

De-Motivators

- Excessive schedule pressure

- Micro management

- Lack of appreciation

- Heavy handed motivation campaigns

- Technically inept management

- Surprise!

- Public reprimand

Two Questions

What are your responsibilities around your own motivation and engagement?

What should you do when you recognize you are no longer motivated or engaged?

For next week

(Teamwork & Team Structure)

Read the INSEAD article

Google, the Network Company: From Theory to Practice

- As you read, consider the following questions:
  - What (other) people-focused activities do you know about at Google?
  - Why does Google do any of these things?
  - What do you think it would be like to work at a company like Google?

Comp8081

end of Week 11

Donna Turner