

FACTORS INFLUENCING HUMAN INTERACTION

Managing Technical People

- *9 week:* **Communication**
- *10 week:* **Decision Making**
- *11 week:* **Negotiation**
- *12 week:* **Conflict Management**
- *13 week:* **Managing Relationships**
- *14 week:* **Leadership**

- **Skills of Effective Managers**
- **Factors of Human Interaction**
- **Process for Managing Human Interaction**
- **What is Culture?**
- **Cultural Dimensions & Cultural Differences**
- **Personality Types**
- **Myers Briggs Type Inventory (MBTI)**
- **“Platinum Rule” Behavior Styles**

- Understand the complexity of software development
- Be aware of the issues surrounding human aspects of software development
- Improve skills in:
 - Communication
 - Conflict resolution
 - Leadership
 - Negotiations
 - Teamwork
 - Situation analysis and decision making

- A multidisciplinary approach combining:
 - Management Science
 - Behavioral Science
 - Decision Science
 - Leadership Science

- You interact with the world around you
- Various factors influence human interactions
- Managing people is challenging
- There is no single solution

“Today’s business graduates have an abundance of technical knowledge. They can do linear programming problems, calculate a discounted rate of return, develop a sophisticated marketing plan and crunch numbers on an excel spreadsheet.

They’re technically solid, but most **lack the interpersonal and social skills necessary to manage people**. If there is an area where business schools need to improve, **it’s in developing the “people skills” of their graduates.**”

- A Corporate Recruiter

“In 360-degree surveys, managers typically rate themselves higher than their colleagues do on most measures of performance.

This well-established pattern holds both for ratings of specific behaviors such as ‘Keeps people up-to-date with information’ and for broader performance measures such as ‘Is an effective manager overall.’ ”

“So You Think You’re a Good Listener” - Patrick Barwise and Sean Meehan, *Harvard Business Review*

WHAT SKILLS MUST AN EFFECTIVE MANAGER HAVE?

- Setting goals
- Decision making
- Working with teams
- Communicating information
- Listening
- Providing feedback
- Leading
- Managing change

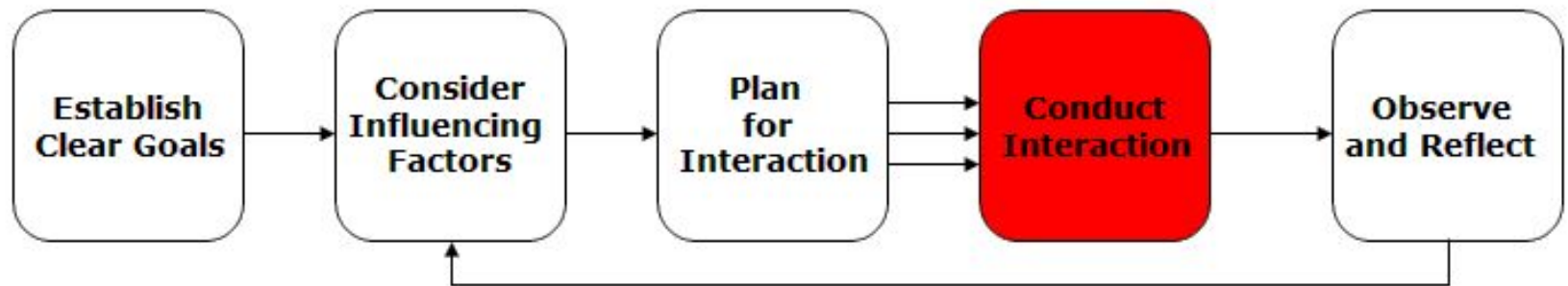
Factors of Human Interaction

Influencing Factors	Culture	Personality	Communication Styles	Motivation	Context	Environment	Interaction Size
Key Human Interactions							
Communications							
Decision Making							
Negotiation							
Conflict Management							
Relationship Management							
Leadership							
Self Management							

Factors of Human Interaction

Influencing Factors \ Key Human Interactions	Culture	Personality	Communication Styles	Motivation	Context	Environment	Interaction Size
Communications	Low	Moderate	High	High	Moderate	Moderate	Low
Decision Making	None	Moderate	High	High	High	Low	Moderate
Negotiation	None	Moderate	Moderate	High	High	None	Moderate
Conflict Management	Low	Moderate	High	High	High	None	Moderate
Relationship Management	None	Moderate	High	High	High	Low	Low
Leadership	None	Moderate	High	High	High	Low	Low
Self Management							

Process for Managing Human Interaction



Think about:

- Goals for the interaction
- Potential influencing factors
- Your plan for the interaction

“Patterns of thinking, feeling and acting
learned throughout a lifetime.”

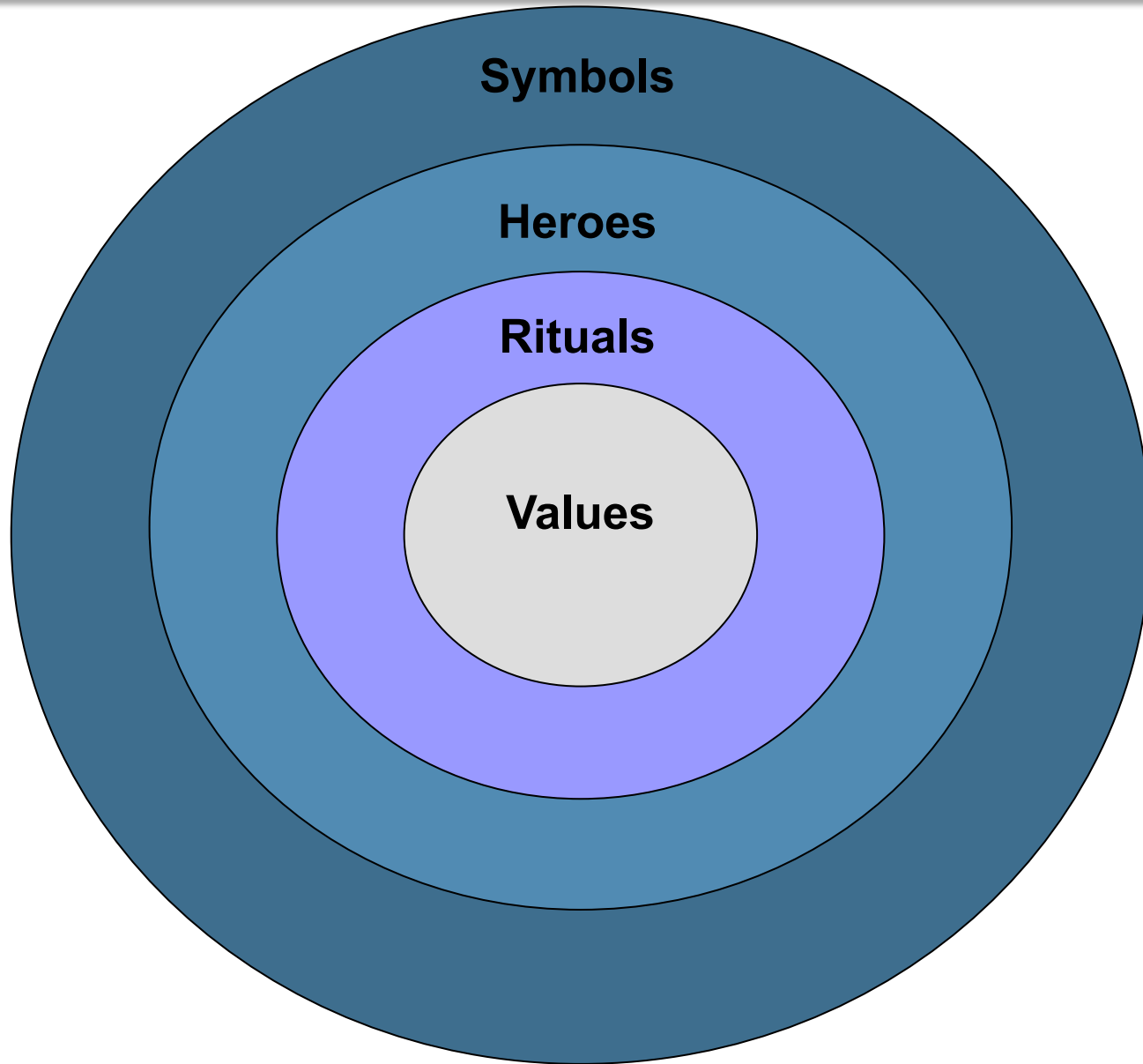
Geert Hofstede

Dutch Social Psychologist

- Culture is comprised of our:
 - Social Environment
 - Life Experiences & Context
 - Family, Friends, Education

- Civilization (Art, Education, etc.) vs. Social Anthropology

- Today's workplace is global
- Recognizing cultural differences helps foster mutual understanding

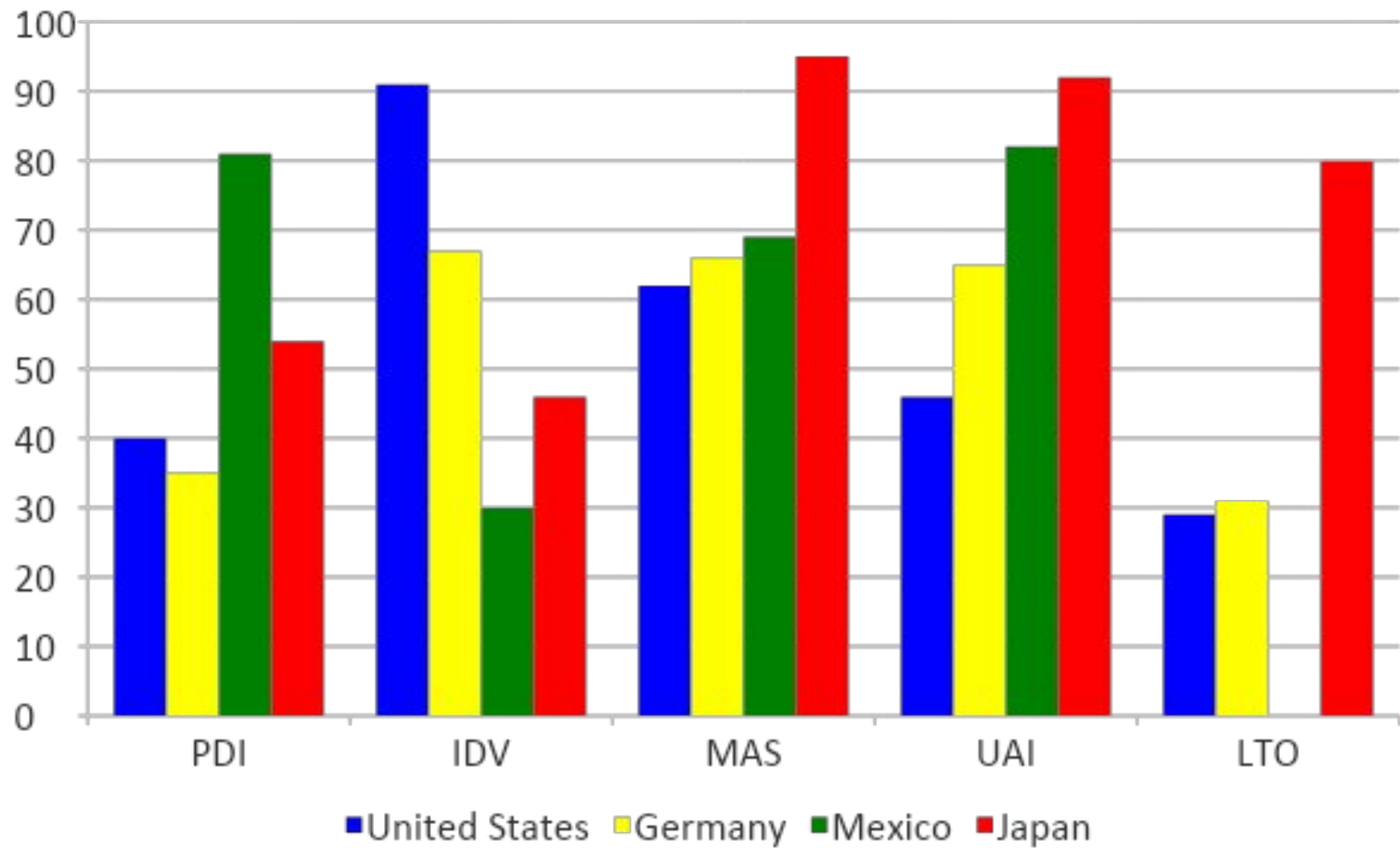


“For a German and a Finn, the truth is the truth. In Japan and Britain, it is all right if it doesn’t rock the boat. In China there is no absolute truth. In Italy, it is negotiable.”

- Richard D. Lewis

- **Power Distance Index (PDI)** Focuses on the degree of equality or inequality between people within society in the country
- **Individualism (IDV)** Focuses on the importance society puts on individual achievement.
- **Masculinity (MAS)** Focuses on the importance a society places on masculine or feminine behavior.
- **Uncertainty Avoidance Index (UAI)** Focuses on the level of tolerance for uncertainty and ambiguity within the society
- **Long-Term Orientation (LTO)** Focuses on the degree the society embraces or does not embrace long-term devotion to traditional, forward-thinking values.

Examples: Culture's Consequences



- How do Hofstede's cultural dimensions apply to software development?

Your phone rings. One of your department heads says he's coming right over with a problem that's "urgent!". He sounds so upset you feel he might be on the verge of an emotional meltdown.

Before he arrives, you ask yourself, "What are the ways I might handle this...?"

Software Developers:

- Are loners
- Like to work in isolation
- Are usually quiet and talk in jargon
- Have difficulty explaining things
- Do not like to be told what to do

Stereotypes exist as a result of someone attempting to categorize personality characteristics and related behavior into discrete types; and associating people with particular personality or behavior types.

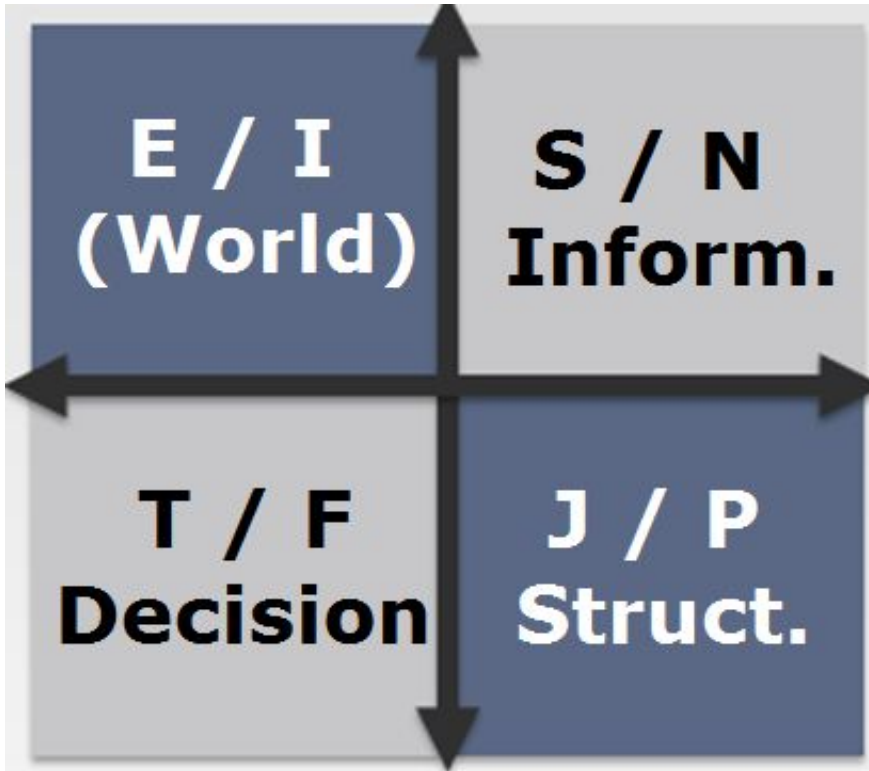
Some names of personality categories or characteristics you might be familiar with include:

- **Extroverted** versus **introverted**
- **Outgoing** versus **shy**
- **High key** versus **low key**
- **Quick tempered** versus **slow to anger**
- **Active** (assertive or aggressive) versus **passive**
- **Sensing** versus **intuitive**
- **Thinking** versus **feeling**
- **Judging** versus **perceiving**

Back in the days of the ancient Greeks, Hippocrates and Galen theorized four categories or personality types which included:

- Choleric (irritable)
- Melancholic (depressed)
- Sanguine (optimistic)
- Phlegmatic (calm)

Myers Briggs Type Inventory (MBTI)



Myers-Briggs Type Inventory :

- Based on Carl Jung's research
- Developed by Katherine Briggs & Isabel Briggs Myers

Four Basic Personality Areas:

- Extroverted or Introverted
- Sensing or Intuitive
- Thinking or Feeling
- Judging or Perceiving

Main application areas use the Myers-Briggs typology:

- self-knowledge and personal growth;
- career and vocational guidance;
- development organizations;
- management and leadership training;
- problem solving;
- family counseling;
- education and curriculum development;
- scientific work;
- training interpersonal interaction

Myers Briggs Type Inventory (MBTI)

Extrovert:

- Action oriented
- Seek breadth of knowledge and influence
- Prefer frequent interaction
- Get energy from spending time with people

Introvert:

- Thought oriented
- Seek depth of knowledge and influence
- Prefer more substantial, meaningful interactions
- Get energy from spending time alone

Myers Briggs Type Inventory (MBTI)

Intuition

- Prefer abstract or theoretical information
- Like discovery
- Interested in future possibilities
- Find meaning in underlying theories and principles

Sensing

- Prefer information that is tangible and concrete
- Distrust hunches
- Prefer details and facts
- Find meaning in data

Thinking

- Make decisions based on reason and logic
- Can have difficulty with people who are illogical or inconsistent
- Give direct feedback

Feeling

- Make decision by association
- Can empathize with a situation
- Look for balance, harmony and consensus
- Consider the needs and perspectives of those involved

Myers Briggs Type Inventory (MBTI)

Judging

- Like things to be settled and organized
- Task-oriented and goal focused
- Prefers to make decisions instead of remaining open to new possibilities

Perceiving

- Like to keep options open
- Prefer to consider a wide range of options and information
- Deal well with change and respond to situation as needed
- Appears to be flexible and spontaneous

Myers Briggs Type Inventory (MBTI)

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

Myers Briggs Type Inventory (MBTI)

ISTJ 11.6%	ISFJ 13.8%	INFJ 1.5%	INTJ 2.1%
ISTP 5.4%	ISFP 8.8%	INFP 4.4%	INTP 3.3%
ESTP 4.3%	ESFP 8.5%	ENFP 8.1%	ENTP 3.2%
ESTJ 8.7%	ESFJ 12.3%	ENFJ 2.5%	ENTJ 1.8%

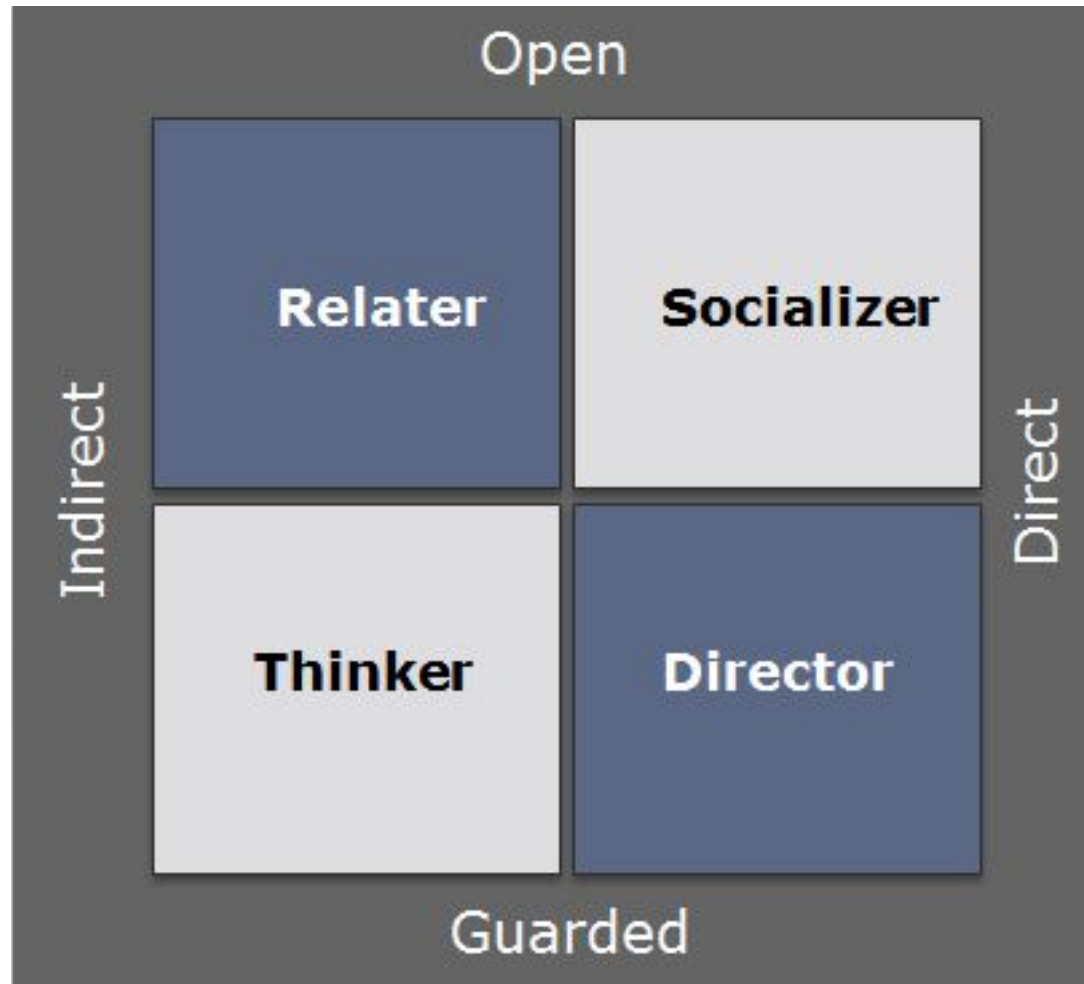
MBTI types and their distribution across US population

ISTJ 24%	ISFJ 2%	INFJ 1%	INTJ 7%
ISTP 8%	ISFP 5%	INFP 2%	INTP 8%
ESTP 8%	ESFP 1%	ENFP 3%	ENTP 7%
ESTJ 15%	ESFJ 4%	ENFJ 1%	ENTJ 4%

MBTI types and their distribution amongst software developers

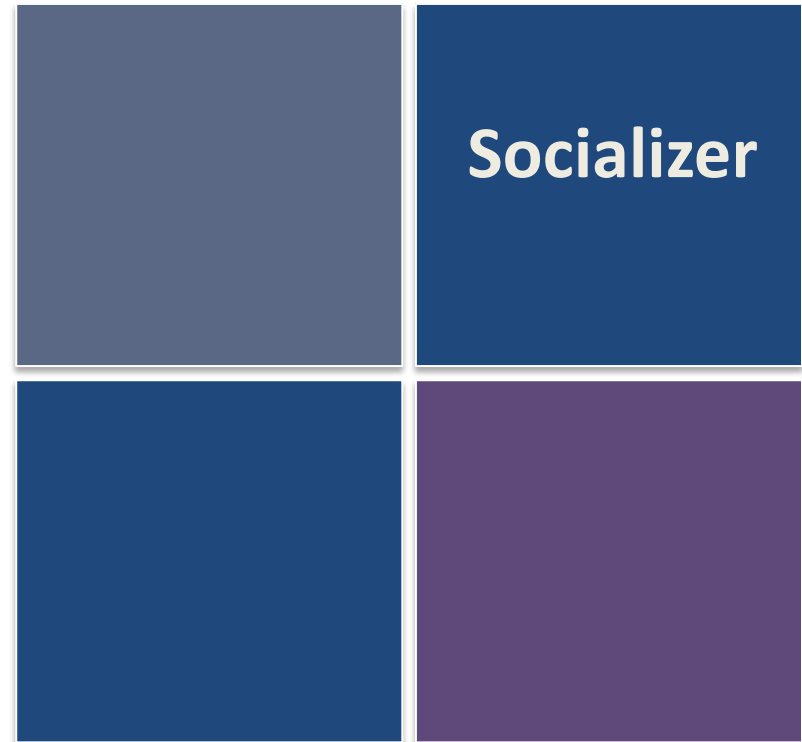
<http://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/>

Platinum Rule Behavior Styles



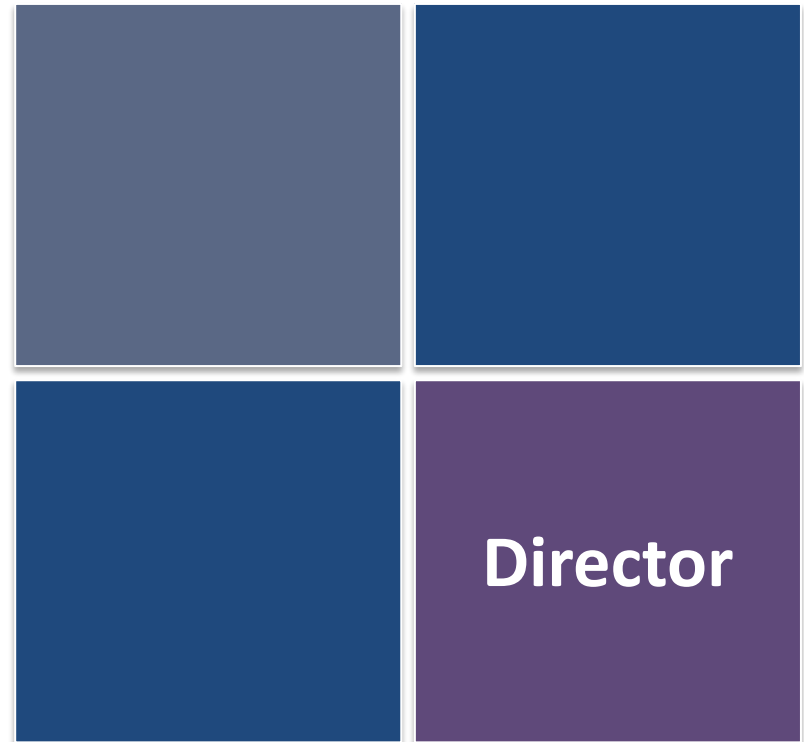
Socializers

- Relationship-oriented
- “Big Picture” people
- Prefer a faster-paced atmosphere
- Gather information verbally
- Like to brainstorm and collaborate
- Are persuasive
- May be impatient
- Can be frustrating for others to work with



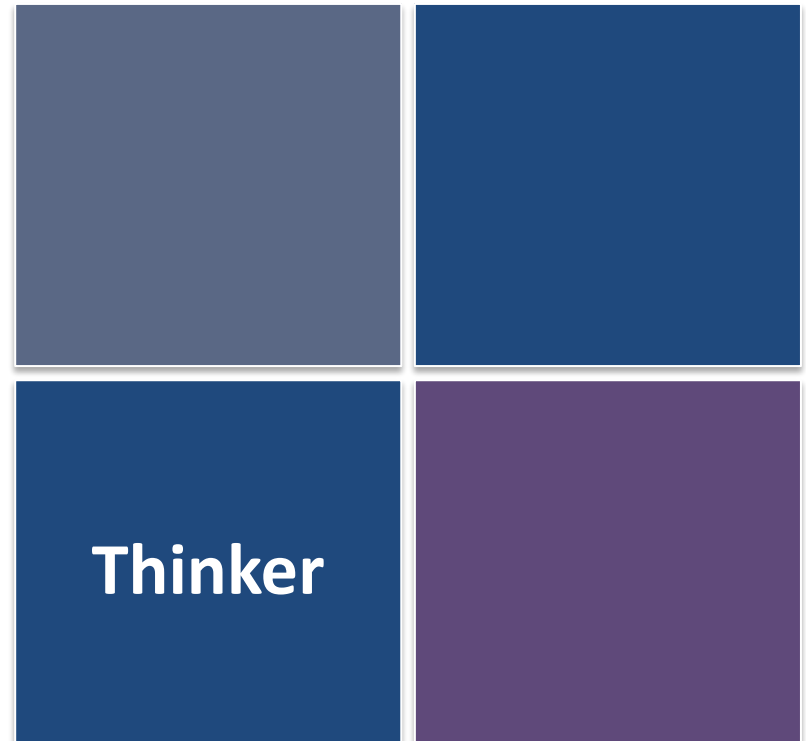
Directors:

- Driven, task-oriented and like to be in control
- Focus on change, growth and goals
- Appear confident
- Enjoy challenges and risks
- Good problem solvers and leaders
- Like fast-paced environments
- Can be abrasive
- May neglect personal life



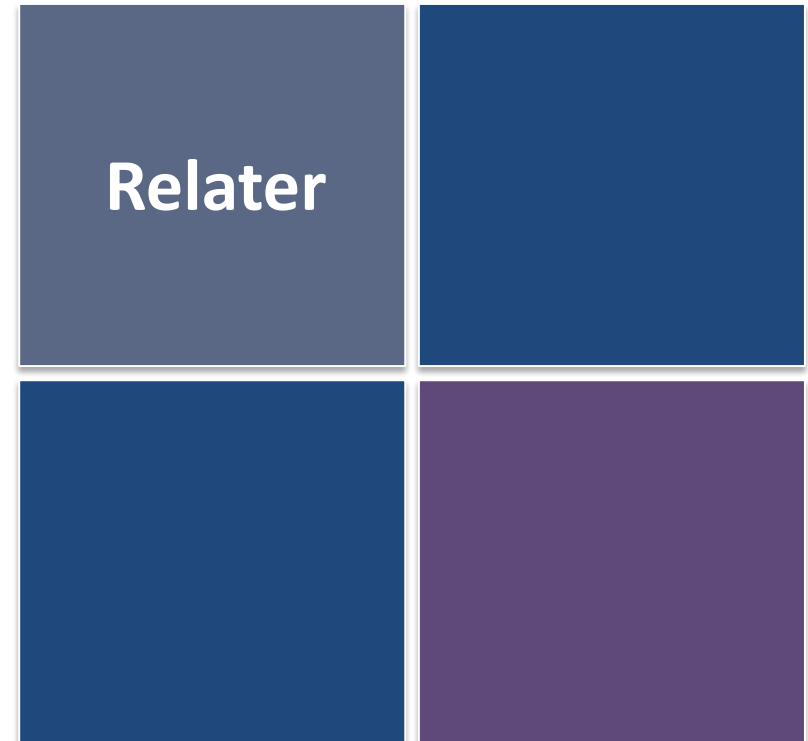
Thinkers:

- Analytic problem-solvers
- Focus on logic and content
- Detailed oriented
- Like process and structure
- Avoid risk, compensate by planning
- Make decisions slowly
- Don't like surprises
- Can be perfectionists



Relaters:

- Relationship-oriented
- Loyal, supportive and reliable
- Foster sincere, long-lasting relationships
- Work well in teams
- Prefer stability
- Avoid risk
- Avoid conflict and disagreement



Reading Assignment: Complete by Next Class Required

- Maslow's Hierarchy of Needs: Building a Happier, More Satisfied Team – *Mind Tools*
- For Best Results, Forget the Bonus – *AlfieKohn.org*