

# Lecture slide topics for today/tomorrow:

Lecture:

- Role of technology
- About teamwork

Practical:

- About interviews

# Other pushes for innovation: technology

# Waves of innovation – the “Push”

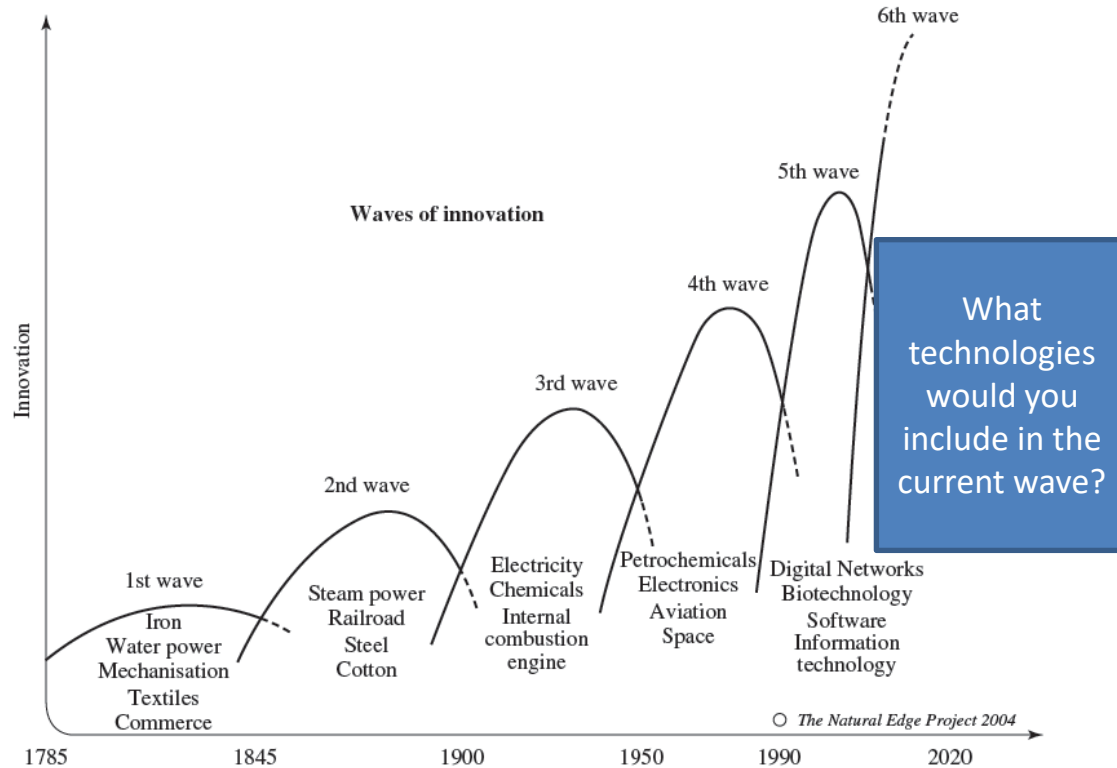
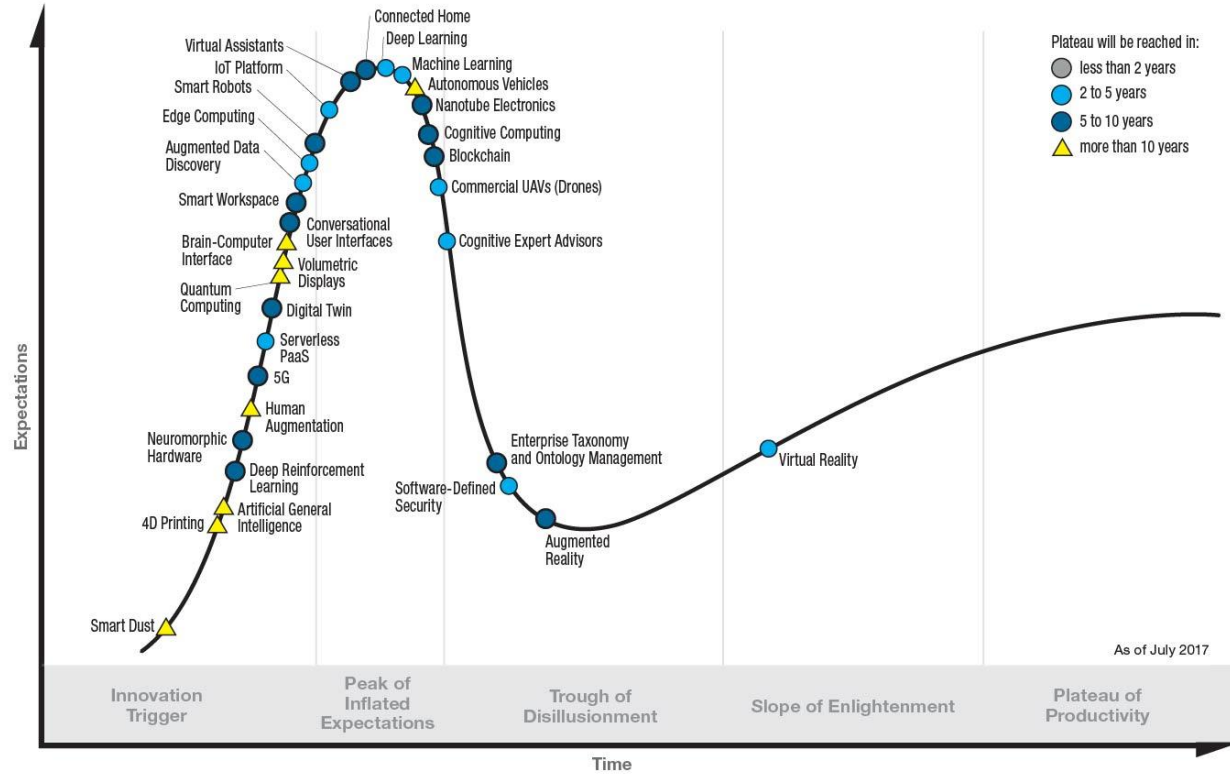


FIGURE 1.5 Waves of innovation throughout history.

# Gartner Hype Cycle for Emerging Technologies, 2017

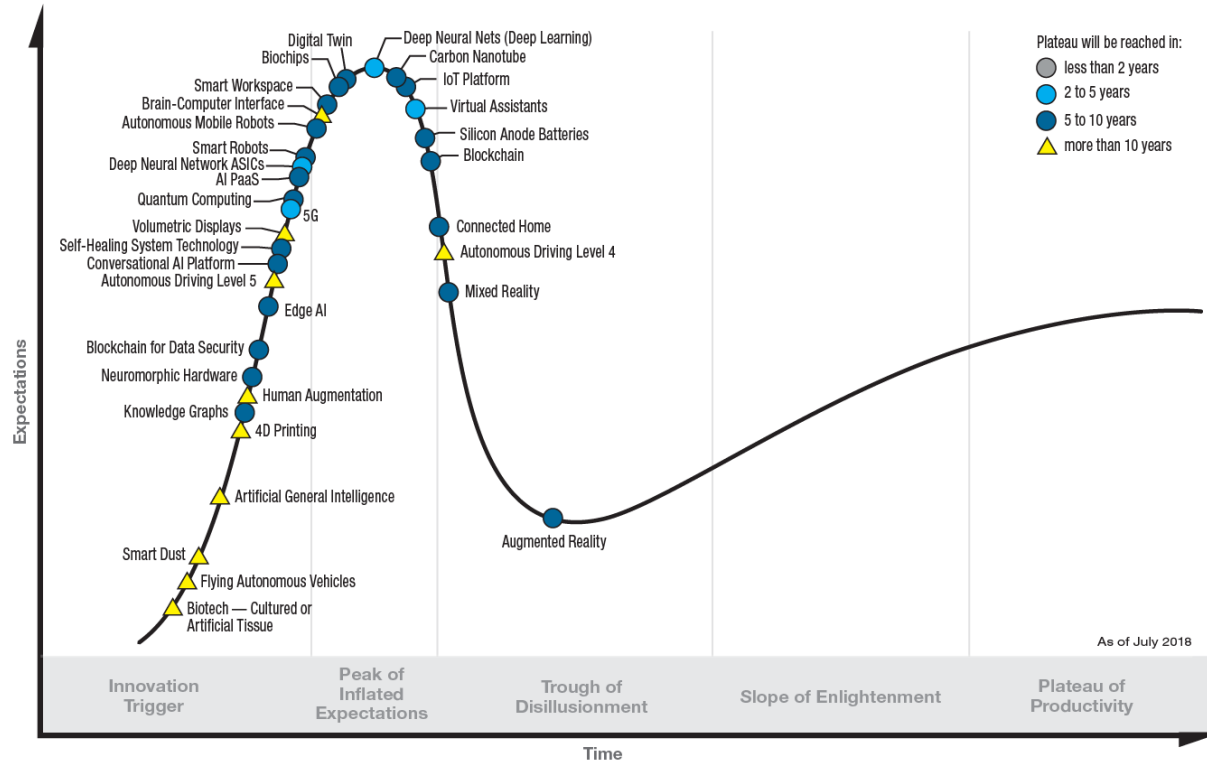


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**Gartner**

# Hype Cycle for Emerging Technologies, 2018



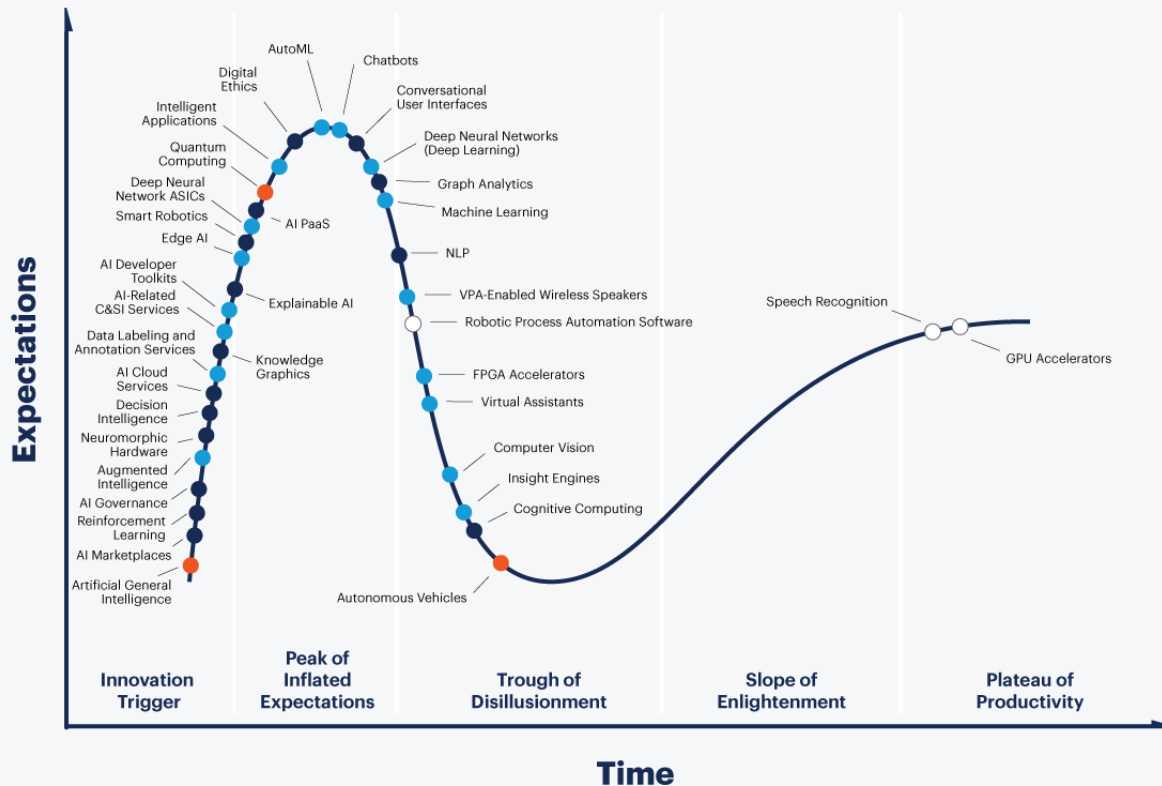
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**Gartner**

# Gartner Hype Cycle for Artificial Intelligence, 2019



Plateau will be reached:

○ less than 2 years

● 2 to 5 years

● 5 to 10 years

● more than 10 years

● obsolete before plateau

As of July 2019

# About Teamwork and People

CP1403

Design Thinking

# Topics

- Learning tasks
- Requirements for teamwork
  - Team value, norms and culture
  - Team communication and collaboration
  - Decision making and conflict resolution
  - More details in readings (“Creating a team culture” and “Conflict Handling”)
- Project Management (not today)
  - Was scheduled for this session but moved to the end of the course



# Readings

- A tip for effective meetings: Always be capturing <http://www.gv.com/lib/a-tip-for-effective-meetings-alwaysbecapturing>
- SPRINT - Chapter 2, pages 29 - 37

# Activity (5 minutes)

- (Group of 5 students)
  - Sharing your experience of doing teamwork?
    - What is the best thing happened to you in your last teamwork experience?
    - What is the worse thing happened to your in your last teamwork experience?

# Teamwork

- What is a team?
  - Teams are similar to social groups except that their membership is not necessarily based on affiliation or friendship, and they have a goal to achieve.
- Success through diversity.
  - Because all people are different, teamwork is an exercise in managing diversity. It is this diversity that is the source of the benefits and the difficulties of teams.
  - A good team benefits from the differences between people
  - A bad team suffers from these differences

# Teamwork (successful teams )

- Broadly speaking, successful teams possess some general characteristics. These are:
  - A team atmosphere which is informal, comfortable, relaxed, involved and interested
  - Discussions involve all parties and remain focused on tasks
  - Tasks and roles are well understood
  - The team is self-conscious about its own operation

# Teamwork (successful teams )

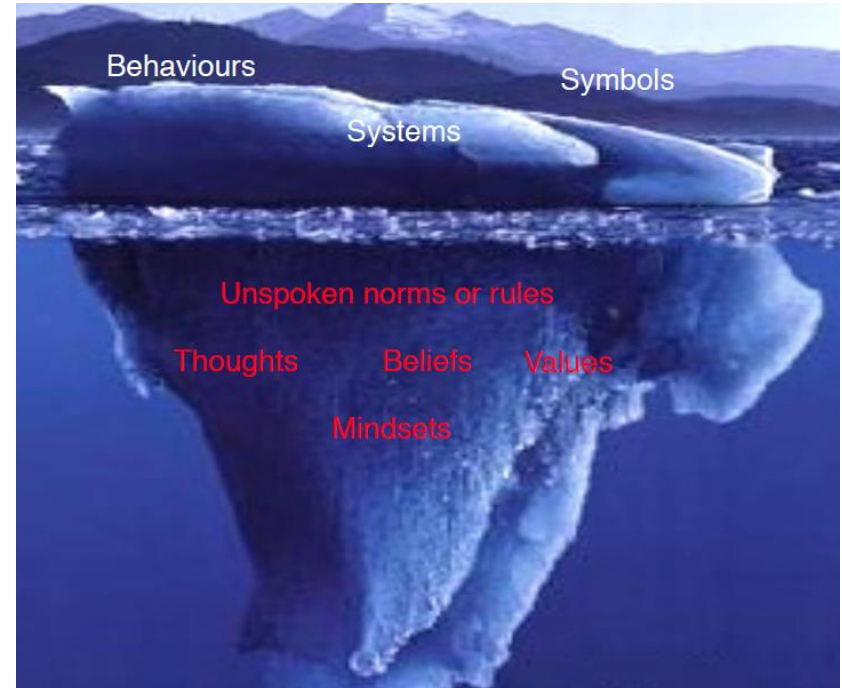
- Team members listen to each other
- When disagreement occurs, team members carefully examine the issues and seek to resolve them through consensus
- Criticism is frequent and frank, focused on team goals rather than individual characteristics
- There are few hidden agendas
- The leader does not dominate, with leadership moving between members as required

# Synergistic Team

- A cohesive group of people with complementary skills, committed to a **shared vision, value and behaviour** for which they hold themselves **mutually accountable**.
- They are more than sum of their parts. They have the ability as a group to outperform even their best individual member.

# Team Culture & Rules

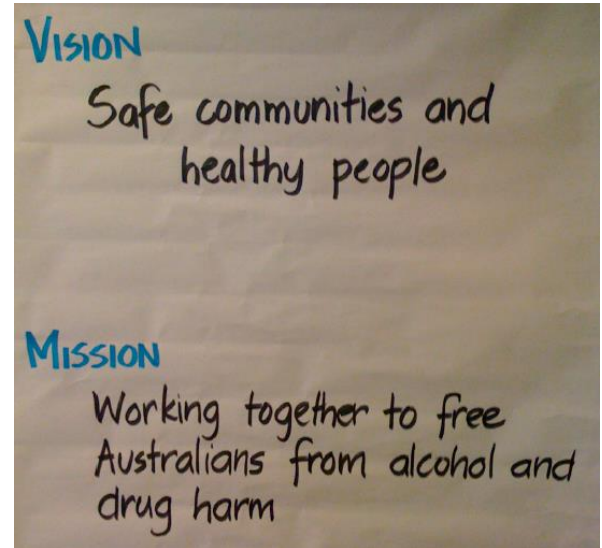
- Team culture are the common vision, values, practices and behaviors all team members agreed on.



# Team Culture & Rules

- Shared vision
  - Creating a clear and deep sense of purpose!
  - Providing a “line of sight” for all team members so they understand how they personally and collectively contribute!

## Australian Drug Foundation





# Team Culture & Rules

- Agreeing values, practice and behaviors
  - Identifying what we are not prepared to compromise as a team in achieving the shared vision
  - Agreeing what this looks like in action i.e. team member behaviours
  - Aligning practices to the vision and value

# Different types of Team Culture



# Team Cultures

- **Innovative cultures** are flexible and adaptable, and experiment with new ideas.
- **Aggressive cultures** value competitiveness and outperforming competitors:
- **Outcome-oriented cultures** emphasize achievement, results, and action as important values.
- **Detail-oriented cultures** are emphasizing precision and paying attention to details

# Team Cultures

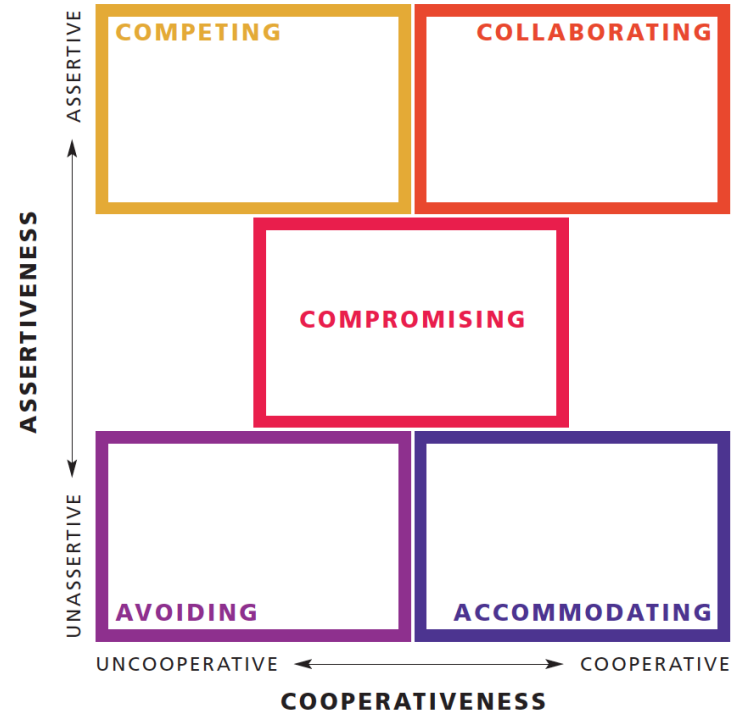
- **Stable cultures** are predictable, rule-oriented, and bureaucratic, aim to coordinate and align individual effort for greatest levels of efficiency.
- **People-oriented cultures** value fairness, supportiveness, and respect for individual right, “people are their greatest asset.”
- **Team-oriented cultures** are collaborative and emphasize cooperation among members.

# Team Conflict

- Conflict - situations in which the concerns of two people appear to be incompatible
- We can describe a person's behavior in conflict situation along two basic dimensions:
  - **assertiveness**, the extent to which the individual attempts to satisfy his or her own concerns
  - **cooperativeness**, the extent to which the individual attempts to satisfy the other person's concerns.

# Team Conflict

- These two dimensions of behavior can be used to define five methods of dealing with conflict.



# Team Conflict Handling Mode - **Competing**

- **Competing** is assertive and uncooperative, a power-oriented mode.
- When competing, an individual **pursues his or her own concerns at the other person's expense**, using whatever power seems appropriate to win his or her position.
- Competing might mean **standing up for your rights**, defending a position you believe is correct, or simply trying to win.

# Team Conflict Handling Mode - Competing

- Skills
  - Arguing or debating
  - Using rank or influence
  - Standing your ground
  - Stating your position clearly
  - Asserting your opinions and feelings.
- Appropriate situations in which to use this style
  - Quick action is required
  - Unpopular decisions need to be made
  - Vital issues must be handled
  - To protect your self-interests



# Team Conflict Handling Mode - Collaborating

- Collaborating is both assertive and cooperative.
  - individual attempts to work with the other person to find a solution that fully satisfies the concerns of both.
  - It involves digging into an issue to identify the underlying concerns of the two individuals and to find an alternative that meets both sets of concerns.

# Team Conflict Handling Mode - Collaborating

- Skills
  - Active Listening
  - Nonthreatening confrontation
  - Identifying Concerns
  - Analysing input

# Team Conflict Handling Mode - Collaborating

## Appropriate situations in which to use this style

- Have time and energy to come to a creative, integrative decision
- The conflict is of enough importance to warrant the necessary time and energy
- Vital issues must be handled
- When the issues are too important to compromise
- When merging perspectives
- When gaining commitment, improving relationships & learning
- When innovation and creativity is demanded

# Team Conflict Handling Mode - Compromising

- Compromising is intermediate in both assertiveness and cooperativeness.
  - individual has the objective of finding an expedient, mutually acceptable solution that partially satisfies both parties.
  - seek a middle ground between competing and accommodating

# Team Conflict Handling Mode - Compromising

- Skills
  - Negotiating
  - Assessing value
  - Finding a middle ground
  - Making concessions
- Appropriate situations in which to use this style
  - Issues are of moderate importance
  - Equal power status
  - Strong commitment to resolution
  - As a temporary solution when you have time constraints

# Team Conflict Handling Mode - Avoiding

- Avoiding is unassertive and uncooperative
  - individual does not immediately pursue his or her own concerns or those of the other person.
  - Avoiding might take the form of diplomatically sidestepping an issue, postponing an issue until a better time, or simply withdrawing from a threatening situation.

# Team Conflict Handling Mode - Avoiding

- Skills
  - Ability to withdraw
  - Using rank or influence
  - Ability to leave things unresolved
  - Ability to sidestep issues
  - Sense of timing
- Appropriate situations in which to use this style
  - Issues are of low importance
  - Need to reduce tensions
  - Need to buy some time before making a decision
  - When you are in a position of low power

## Team Conflict Handling Mode - Accommodating

- Accommodating is unassertive and cooperative
  - individual neglects his or her own concerns to satisfy the concerns of the other person
  - Accommodating might take the form of selfless generosity or charity, obeying another person's order when you would prefer not to, or yielding to another's point of view.



# Team Conflict Handling Mode - Accommodating

- Skills
  - Forgetting your desires
  - Ability to yield
  - Selflessness
  - Obeying orders
- Appropriate situations in which to use this style
  - To show reasonableness
  - To develop performance of others
  - To create goodwill
  - To keep the peace

# Activity (10 minutes)

- (Group of 5)
  - Share your last experience of encountering and handling a conflict situation
  - Which of the 5 conflict handling modes you have used ?

# Understanding People

- In order that human activities can be managed or directed, it is necessary to understand people!
- Far too often managers focus too much on the tasks to be done rather than the people who will do them
- As in most things, a balance is needed

*“You can take a horse to the water,  
but you cannot make it drink!”*

# Maslow's Motivation Theory

Main ideas:

- Human behaviours are guided or motivated by a *hierarchy of needs*,
- The needs can be arranged in form of a pyramid,
- Each level is a pre-requisite of the next level up in the hierarchy,
- Once a particular need is satisfied, it cannot be served any longer as a potent motivator of behaviour.

# Maslow's Motivation Theory (cont.)



# Maslow's Motivation Theory (cont.)

- **Physiological needs:** food, sleep, shelter etc.
- **Safety needs:** personal safety, feel secure etc.
- **Social needs:** feel part of a group etc.
  - Allowing people to meet or communicate with their co-workers
  - Providing common places for people to communicate their ideas and work etc.
- **Esteem needs:** feel respected by other people
  - Need to make people feel that they are valued by the organizations
  - Public recognition of achievements is a simple yet effective way of doing this

# Maslow's Motivation Theory (cont.)

- **Self-actualization needs:** personal development, personal growth etc.
  - Give people responsibility for their own work
  - Assign them demanding (but not impossible) tasks
  - Provide a training programme where people can develop their skills

*What's your motivation of studying at Uni and how does it relate to Maslow's theory?*

# Maslow's Motivation Theory (cont.)

- It conveys a *message of hope and growth*
  - People can work to control their own destinies and naturally strive to achieve higher and higher needs
- Issues:
  - The viewpoint on motivation is **exclusively based on personal aspects**
  - It does not give adequate consideration to people as being part of an organization, a professional group or a culture, and getting fulfilment from group success
- Nevertheless, a manager should be aware of this well-tested theory




# Herzberg's dual-factor Theory

- Main assumption: Difference set of factors lead to satisfaction/dissatisfaction (dual continuums)
- Main ideas:
- Distinguish between motivational factors and hygiene factors
- Motivational factors:
  - Factors that can motivate people – leads to satisfaction
  - Examples: achievement, recognition, responsibility, ...
- Hygiene factors:
  - Factors that cannot motivate people but cause dissatisfaction if not present
  - Examples: salaries, working conditions, flexible work hours, ...

# Maslow & Herzberg

Maslow	Herzberg
self-actualisation	motivators
self-esteem	
social	
safety	hygiene
physiological	

# What motivates Students?

- Passing a unit of study
  - Getting a degree
  - Getting a good mark in a unit of study
  - Getting a high distinction in a unit of study
  - Improving job prospects
  - Learning something about a topic area
  - Improving personal knowledge and skills
  - ...
-  *Important to know motivation(s) in group-based work!*

# Understanding Personalities Types

- Working with others can be difficult
- But if you understand another person's behaviour, it helps you work towards common solutions.
- Myers and Briggs - a common psychological personal indicator : 16 personality types (4 temperaments)
  - Extrovert / Introvert (E / I)
  - Sensing / intuition (S / N)
  - Thinking / Feeling (T / F)
  - Judgment / Perception (J / P)
- Knowing about this classification can help you understand how other people act and think.
  - Assists in planning, conflict resolution etc.

# Myers-Briggs Type Indicator

Extrovert / Introvert (E / I)

- It determines if a person is generally extroverted or introverted
- **Extrovert**: people who direct their energy to other people and outer world of activities
- **Introvert**: people who direct their energy to their inner world of ideas and thoughts

# Myers-Briggs Type Indicator (cont.)

## Sensing / iNtuition (S / N)

- It determines how a person gathers information
- Characteristics of sensing type people:
  - They rely on facts, familiarities, details, and reality
  - They consider themselves as practical
- Characteristics of intuition type people:
  - Imaginative
  - Ingenious
  - Attentive to hunches or intuitions

# Myers-Briggs Type Indicator (cont.)

## Thinking / Feeling (T / F)

- It represents the way people make their decisions
- People belonging to **Thinking** category are objective and logical
- People belonging to **Feeling** category are subjective and personal

# Myers-Briggs Type Indicator (cont.)

## Judgment / Perception (J / P)

- It concerns people's attitude towards structure
- Characteristics of **judging** type people
  - They like closure and **task completion**
  - They will **establish deadlines** and take the deadlines seriously, expecting other people to do the same
- Characteristics of **perceiving** type people
  - They prefer to keep things **open** and **flexible**
  - They regard deadlines more as a signal to start rather than complete a project
  - They do not feel that work must be done before play or rest begins



# Myers-Briggs Type Indicator (cont.)

- Take the test: [www.humanmetrics.com/cgi-win/JTypes2.asp](http://www.humanmetrics.com/cgi-win/JTypes2.asp)

# So What?

Is the use of the Myer-Briggs indicator worthwhile?

- Studies have been done to assess its utility
- It is **not universally accepted** that MBTI is of use for predicting job performance, or suitability for inclusion in a team
- Nevertheless, many organisations use MBTI as a tool when hiring or promoting, so it is useful for you to know about it
- The theory is that when putting a team together, it is useful to have a **balance** across MBTI categories.

# Personalities and Teams

- For a team to function “best”, it is suggested that we need a variety of personality types, each contributing in their own way.
- R. Meredith Belbin identified 9 roles:
  - Coordinator
  - Shaper (“worrier”, helps to focus on important issues)
  - Plant (generates ideas and potential solutions)
  - Monitor Evaluator
  - Resource Investigator
  - Team Worker
  - Implementer
  - Completer/Finisher
  - Specialist (aka “techie”)

# Personalities (cont.)

- Successful teams need a *good mix* of people who fill all these typical roles.
- Often, unsuccessful teams have too many of the same type of person
  - be wary of groups of “techies”!
  - Consider working apart from your best friends!
- Test can be found on Web by searching for “Belbin test for assessing team roles”.

# Varieties of “Difficult” People

- The know-it-all
- The think-they-know-it-all
- The do-it-all-myself
- The YES person
- The maybe person
- The nothing person
- The NO person
- The whiner

# Team Communication

- Project team meet to discuss issues and share ideas, however, not all team meetings are effective
  - <https://www.youtube.com/watch?v=vE7jfQt2ic4>
- Always be capturing is important one way of effective communication in team meeting

# Always be Capturing

- It is a habit of continuously recording the value of your conversation
- For example: If you're talking about a new concept, you should be sketching it as you talk so your team has a shared understanding and an artifact of the conversation.

# How to Capture

- Fill your whiteboards / walls / desk with notes
- Write down individual ideas, questions, or UI elements on Post-its.
- Take photos of notes and drawings with your smartphone
- upload the photos from your smartphone directly to a shared folder , e.g. Dropbox



# Some Principles of Capturing

- Don't repeat yourself
  - look around the room at everything your team captured to see if you were repeating yourselves.
- If you can't capture it, stop talking, since you are not really pushing anything forward
- Appoint a facilitator to serve as an objective manager of the discussion and sure that everything got captured and that everyone stayed on point.

# Some Principles of Capturing

- **Write down or sketch everything important**
  - If you're comparing two things, just make a two-column table and write out the differences.
  - If you're talking about a bunch of features, write them down on Post-its and sort them on the wall.
  - If you're brainstorming a concept, sketch it out. This immediately shows you whether everyone is thinking of the same thing.

# Leading Collaboration Teams

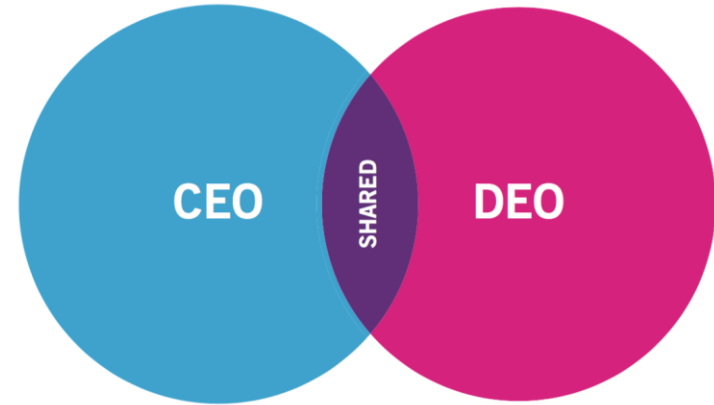
- Nautilus "The Anatomy of Charisma": <http://nautil.us/issue/45/power/the-anatomy-of-charisma>
- HBR "As Your Team Gets Bigger, Your Leadership Style Has to Adapt": <https://hbr.org/2019/03/as-your-team-gets-bigger-your-leadership-style-has-to-adapt>
- New York Times "Why Some Teams Are Smarter Than Others": <https://www.nytimes.com/2015/01/18/opinion/sunday/why-some-teams-are-smarter-than-others.html>
- Behavioral Scientist "Bursty" Communication Helps Remote Teams Thrive": <https://behavioralscientist.org/bursty-communication-can-help-remote-teams-thrive/>
- HBR "How to Lead When You're Not the Boss": <https://hbr.org/2009/02/how-to-lead-when-youre-not-the>
- HBR "Making Decisions Together (When You Don't Agree on What's Important)": <https://hbr.org/2013/11/making-decisions-together-when-you-dont-agree-on-whats-important>
- Vox "A Stanford Psychologist on the Art of Avoiding Assholes": <https://www.vox.com/conversations/2017/9/26/16345476/stanford-psychologist-art-of-avoiding-assholes>
- New York Times "Give Compassionate Feedback While Still Being Constructive": <https://www.nytimes.com/2020/02/24/smarter-living/how-to-give-helpful-feedback.html>
- TED Ideas "How Do Good Leaders Give Advice?": <https://ideas.ted.com/how-do-good-leaders-give-advice-the-short-answer-they-dont/>

# Design Leader

1. "Rise of the DEO: From CEO to DEO": <https://www.youtube.com/watch?v=f4894789de47>

## Six defining traits of good designers and as

- **Change agents** - comfortable disrupting
- **Risk takers** - embrace risk as an inherer
- **System thinkers** - understand the interc
- **Intuitive** - intuitively enhanced decisioi
- **Socially intelligent** - prefer spending tin equipment, plants, or spreadsheets
- **GSD** - They feel an urgency to get perso interaction, and to lead by example



CEO TRAITS	SHARED TRAITS	DEO TRAITS
<ul style="list-style-type: none"> <li>Top executive</li> <li>Authoritative</li> <li>Linear thinker</li> <li>Executes to plan</li> <li>Maintains stability and order</li> <li>Commands respect</li> <li>Must be accurate</li> <li>Delegates actions</li> <li>One-way communication</li> <li>Follows the manual</li> <li>Doesn't like to fail</li> <li>Sensitive to threats</li> </ul>	<ul style="list-style-type: none"> <li>Ambitious</li> <li>Confident</li> <li>Rational</li> <li>Competitive</li> </ul>	<ul style="list-style-type: none"> <li>Most senior partner</li> <li>Aspirational</li> <li>Systems thinker</li> <li>Experiments and improvises</li> <li>Permits useful disruption</li> <li>Earns respect</li> <li>Comfortable with ambiguity</li> <li>Hands-on when needed</li> <li>Networked</li> <li>Adapts and iterates as needed</li> <li>Learns from mistakes</li> <li>Open to new experiences</li> </ul>