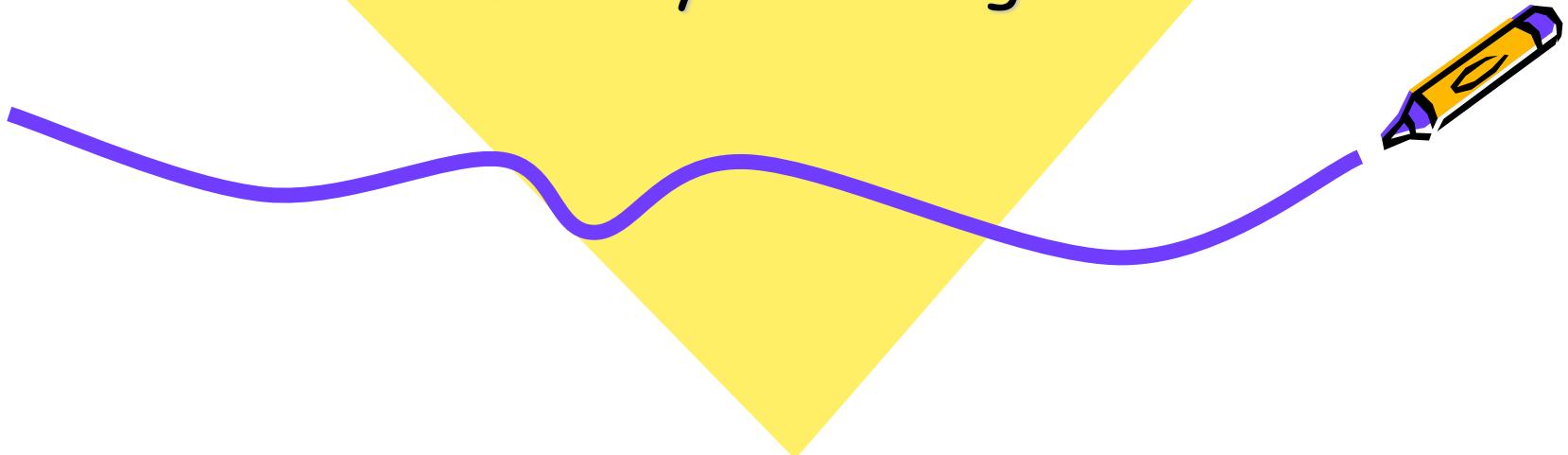


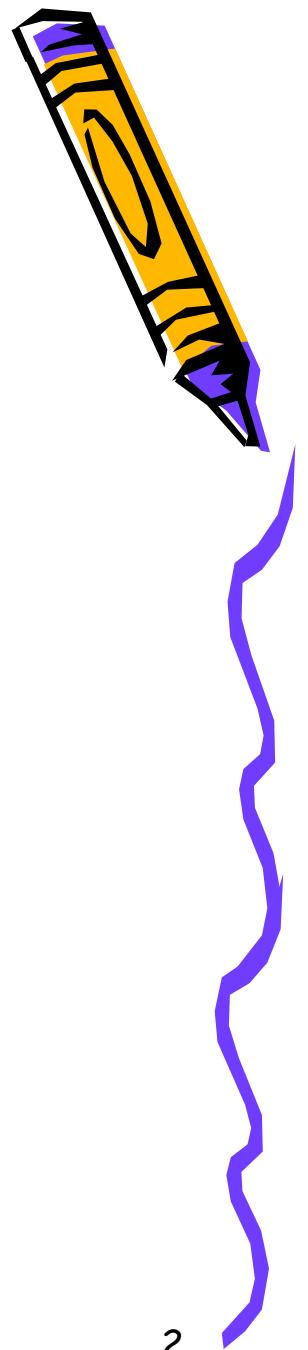
# Personal Development Planning

Prof. Koliya Pulasinghe

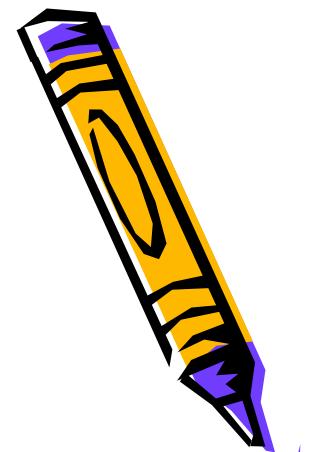


# Agenda

- Personal Development Planning
- Reflective Practice
- SWOT Analysis
- Planning

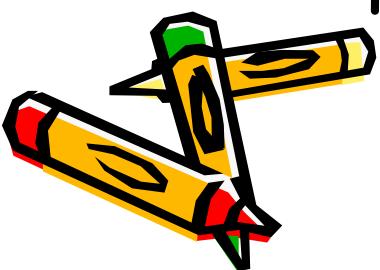


# Personal Development Planning

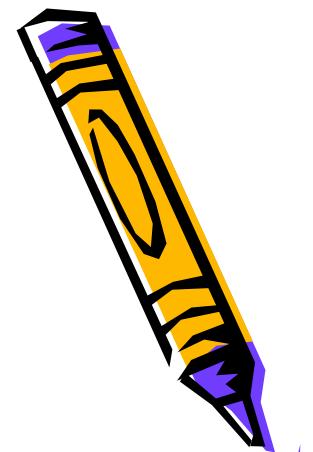


Why we need PDP?

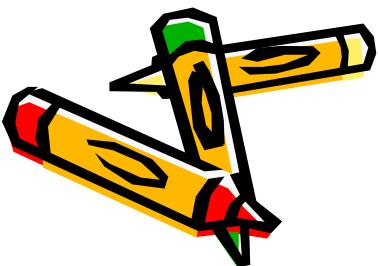
- Industry is rapidly changing, if we don't change/develop we will become obsolete
- Taking personal responsibility over self development - It is our responsibility to develop ourselves



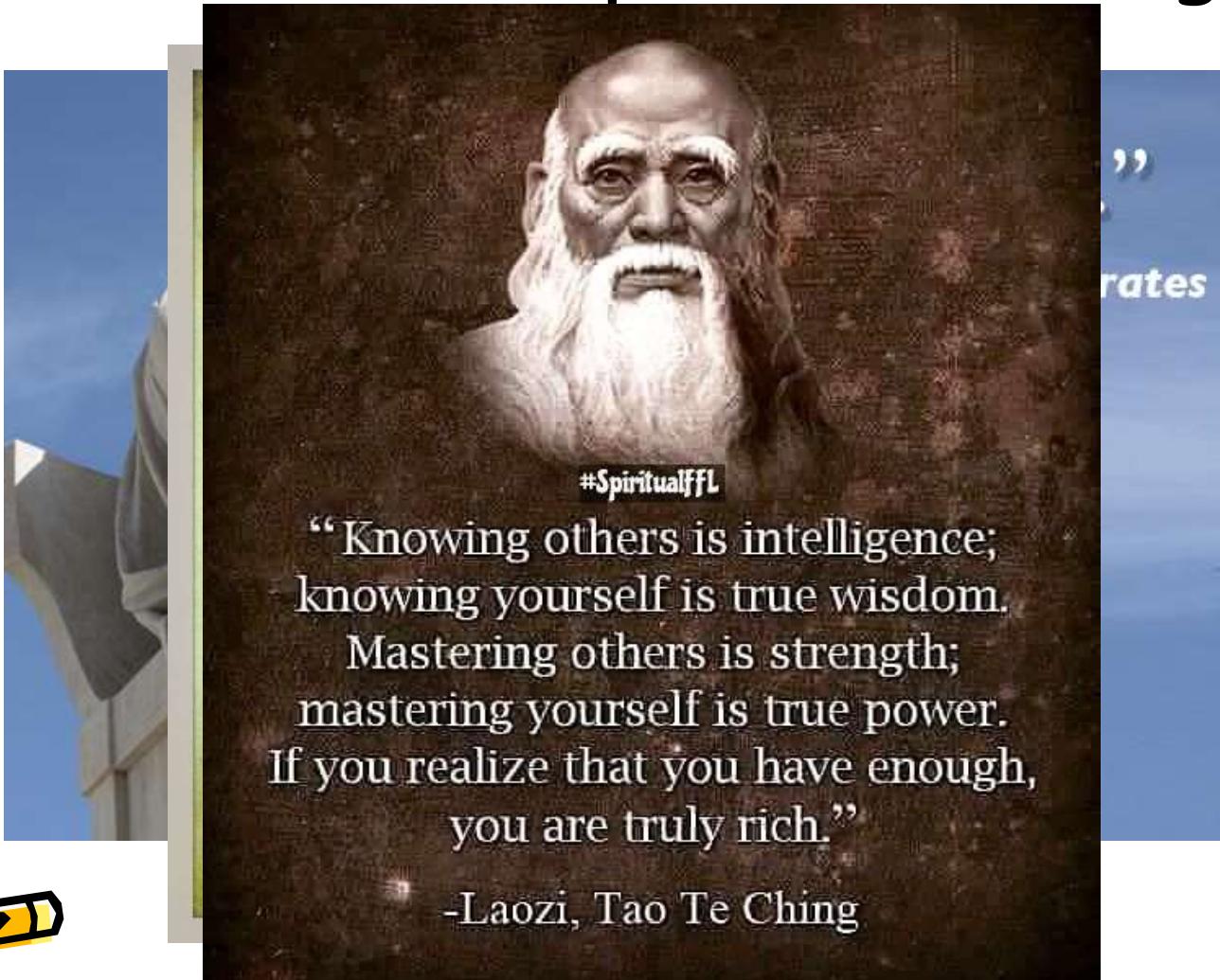
# Personal Development Planning



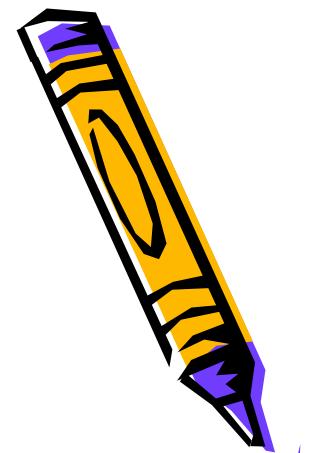
- PDP is a record of achievements, learning experiences and plans
- It is prepared in order to recognise your achievements, understand how you gained your existing skills, plan to enhance them further and develop new ones



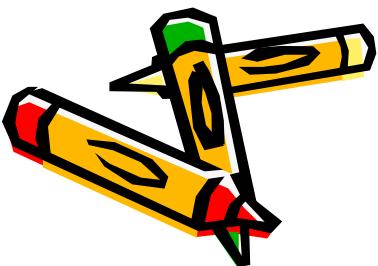
# Personal Development Planning



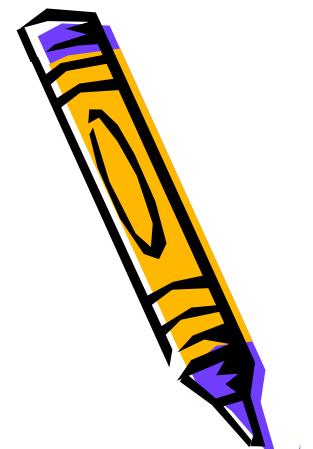
# Personal Development Planning



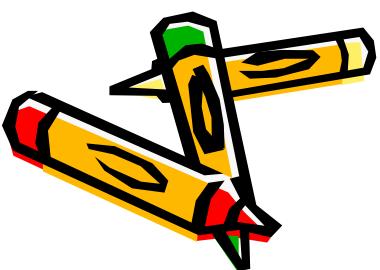
- PDP is driven by:
  - **Reflecting**: how past skills are gained, reasons on successes and failures
  - **Planning**: how you are going to develop a certain skill that you want or need to face the future/to complete your degree, follow a specific career or achieve a personal goal



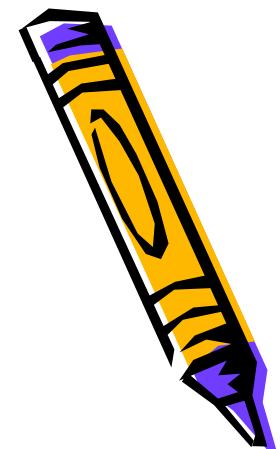
# Personal Development Planning



- It involves you building up **a record** of achievements, personal reflections and plans for self-improvement
- The more you practise PDP, you are aware of your skills, the more developed they will become
- the better **your sense of personal achievement** your focus on your goals/gaps



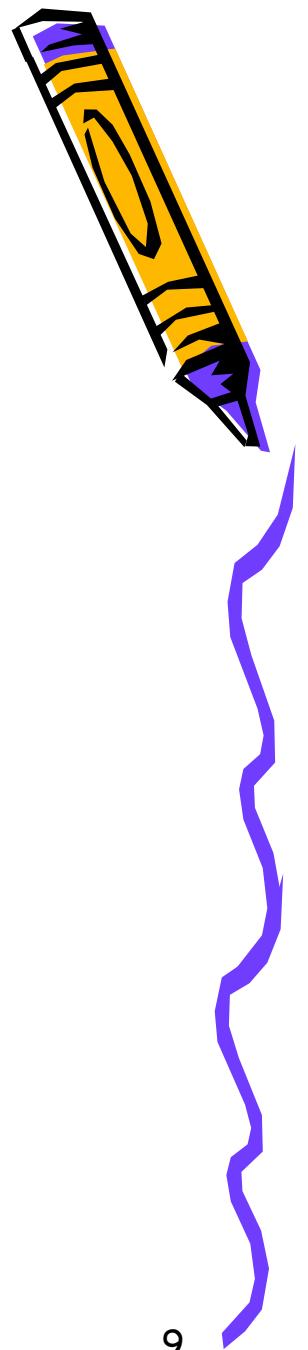
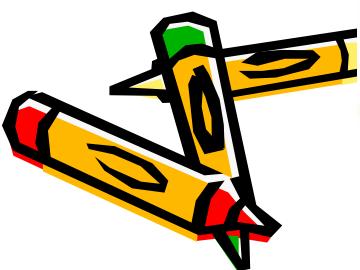
# Reflective Practice

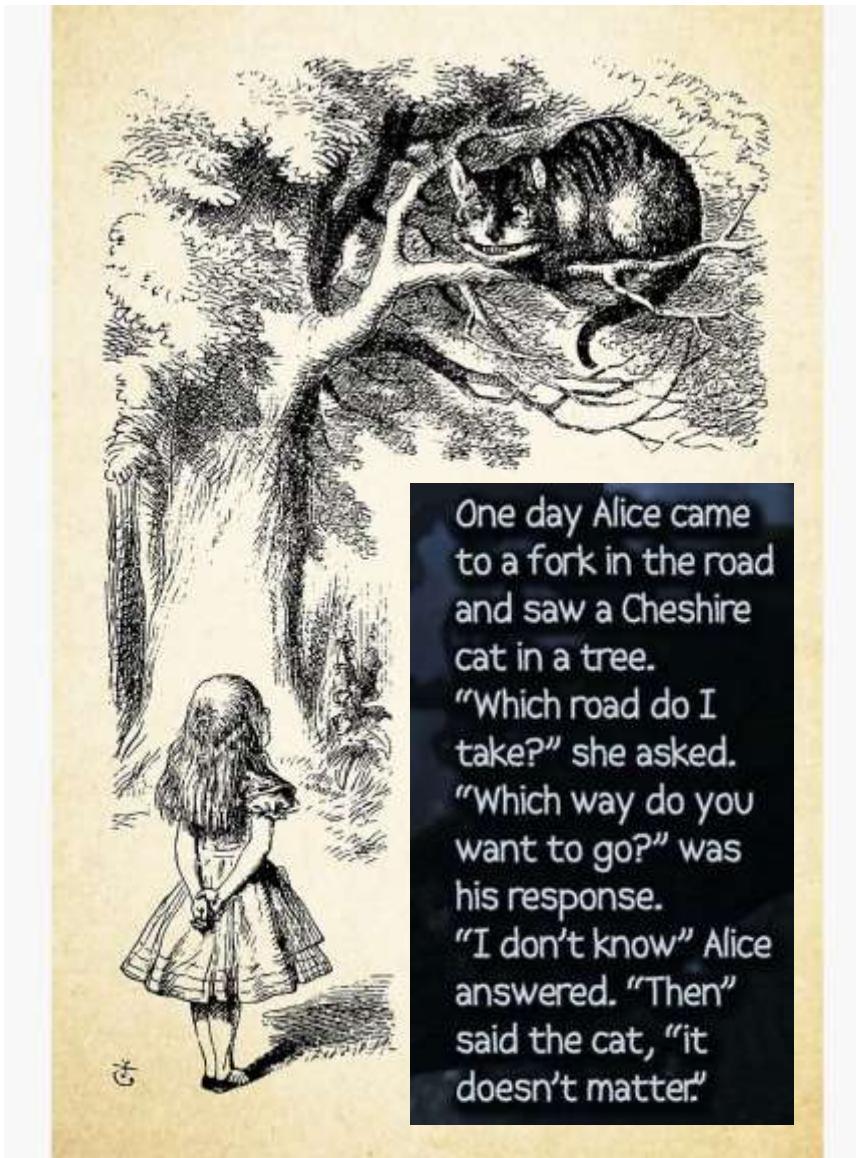


- In order to learn effectively it is not enough to simply have an experience
- In order to maximise the learning potential of the situation before it is lost, we need to **reflect on** the experience
- Reflecting is an important stage of the PDP process
- You need to **reflect** in order to improve and develop your skills and knowledge; the idea is that you learn from your successes and mistakes

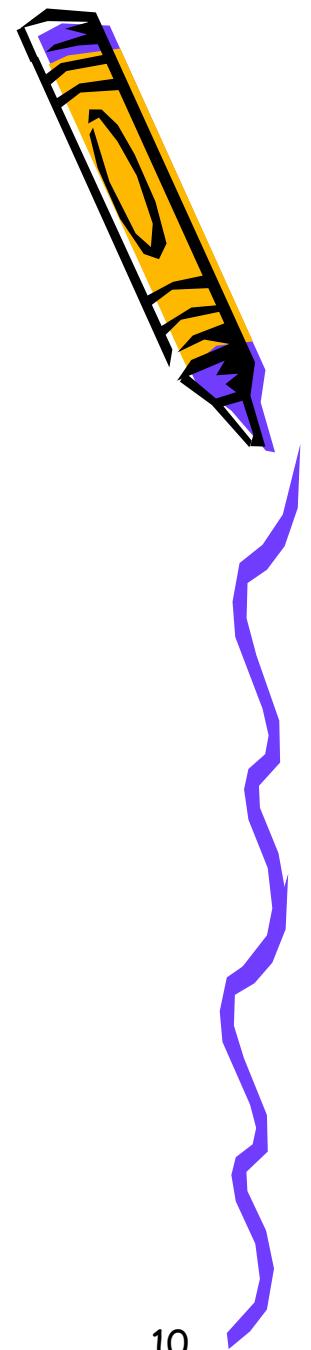
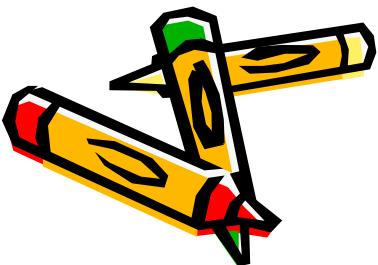


# Gibb's Reflective Cycle

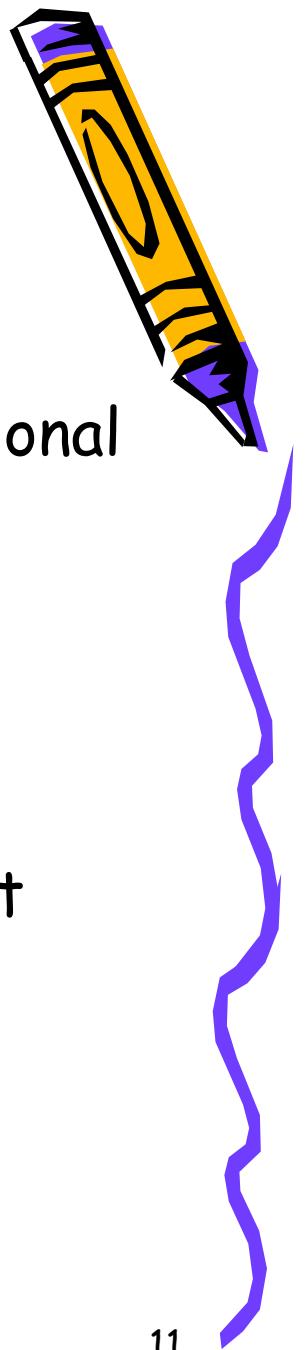




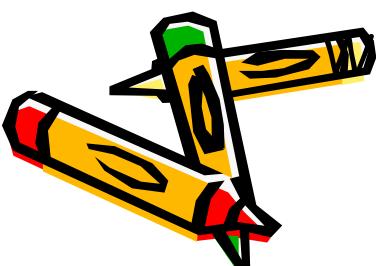
One day Alice came  
to a fork in the road  
and saw a Cheshire  
cat in a tree.  
"Which road do I  
take?" she asked.  
"Which way do you  
want to go?" was  
his response.  
"I don't know" Alice  
answered. "Then"  
said the cat, "it  
doesn't matter!"



# Personal Development Plan

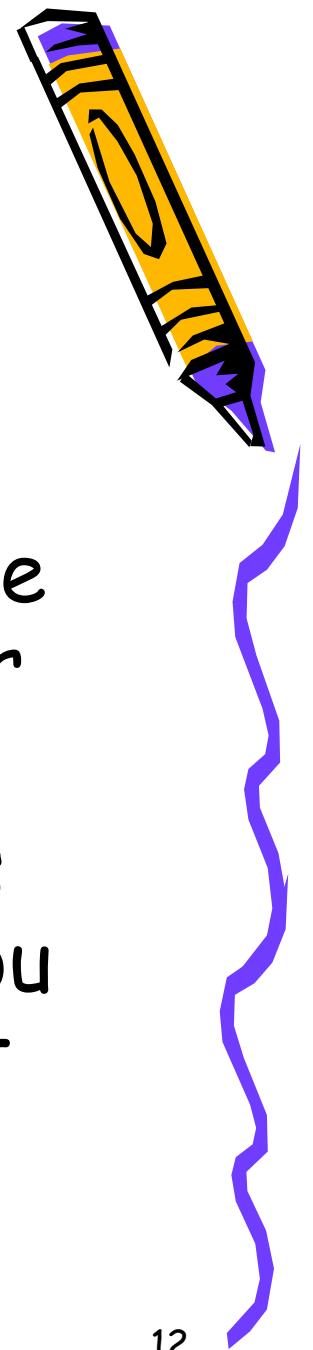


- In professional world this is called as professional development plan
- Starts with a goal or a gap analysis
  - Ex: Goal Setting:
    - Want to get A+ for SE
    - Improve Body Mass Index from 28 to 25 (Gap 3 units)
- Prepare a strategic plan to achieve your target
  - Use SWOT Analysis
  - SW Internal Factors, OT External Factors
  - SO Favourable (Helps you to achieve your goals)
  - OT Unfavourable (Blocks your progress)



# SWOT Analysis

- A SWOT Analysis is a tool for identifying your **Strengths** and **Weaknesses**, and for examining the **Opportunities** and **Threats** to your goals
- SWOT Analysis helps you to focus your activities into areas where you are strong and where the greatest opportunities lie

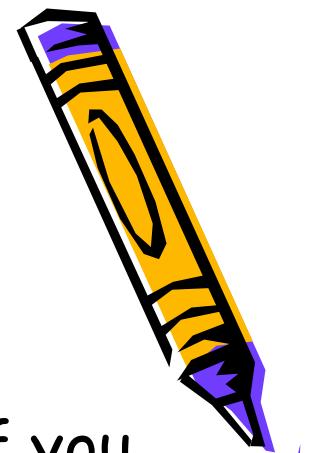


# Strengths

## SWOT Analysis

- What **skills** or **experience** do you already possess? Give examples to evidence these if you can.
- What do you do well?
- What do **other people see** as being your strengths? Consider this from your own point of view and from the point of view of the people who know you. Don't be modest - be realistic.

If you are having any difficulty with this, try writing down a list of your characteristics. Some of these will probably be strengths.



## Weaknesses

- What could you improve on?
- What do you do badly?
- What should you avoid?
- Do other people consider you to have weaknesses that you do not agree with? Why do they think that? Do you see weaknesses in yourself that others do not see as being a problem?



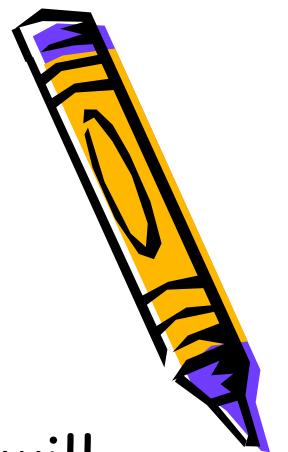
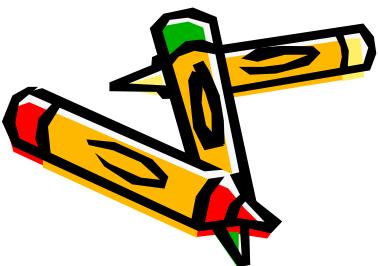
# SWOT Analysis



# Opportunities

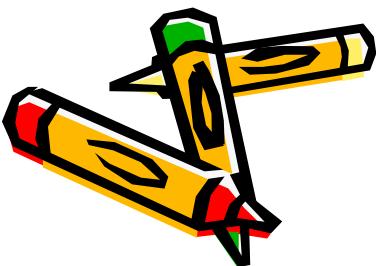
# SWOT Analysis

- What **resources** are available to you?
- Consider the **networking opportunities** that will be available to you. How will you make best use of these?
- What are the **interesting trends** you are aware of in the graduate employment market?
- How can you develop yourself according to these?
- Are there any **other learning opportunities**, in addition to those offered by your degree programme, that you are interested in exploring?

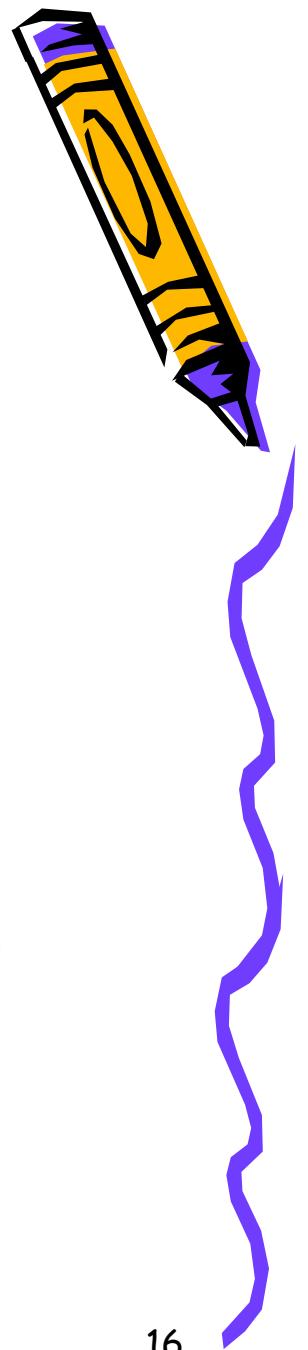


## Threats

- What **obstacles** do you face?
- Could any of your **weaknesses** seriously threaten your opportunities? What are they?
- Do you have past experience of **trying and failing** to achieve your goals?

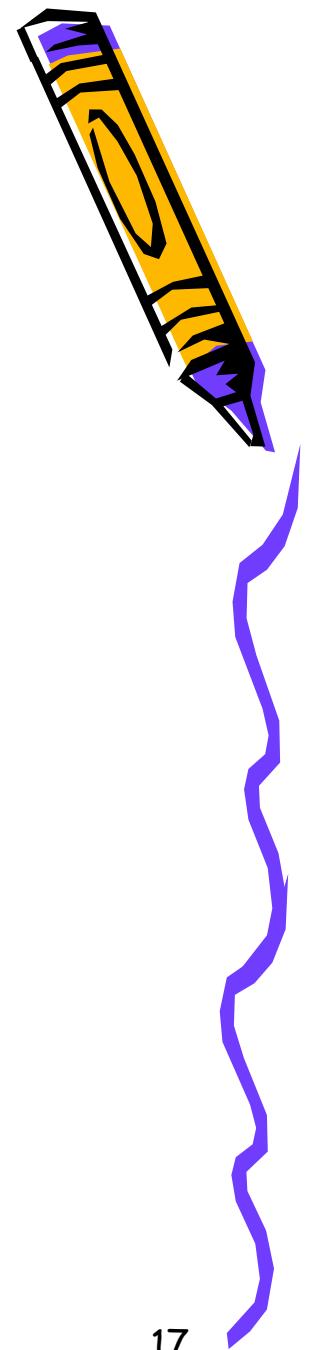
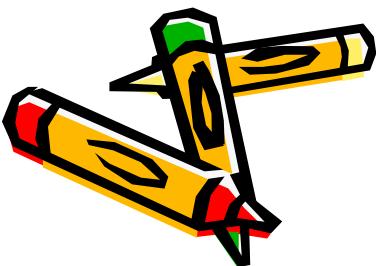


# SWOT Analysis

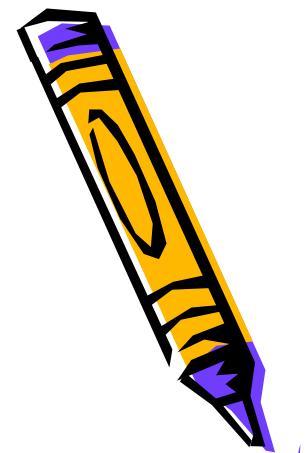


# Plan (Strategies)

- SMART
  - Specific
  - Measurable
  - Achievable
  - Relevant
  - Time Bound

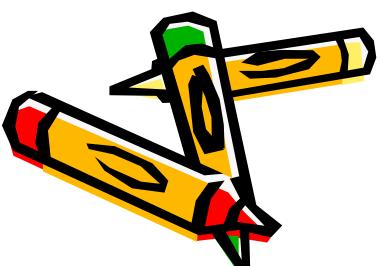


# PDP



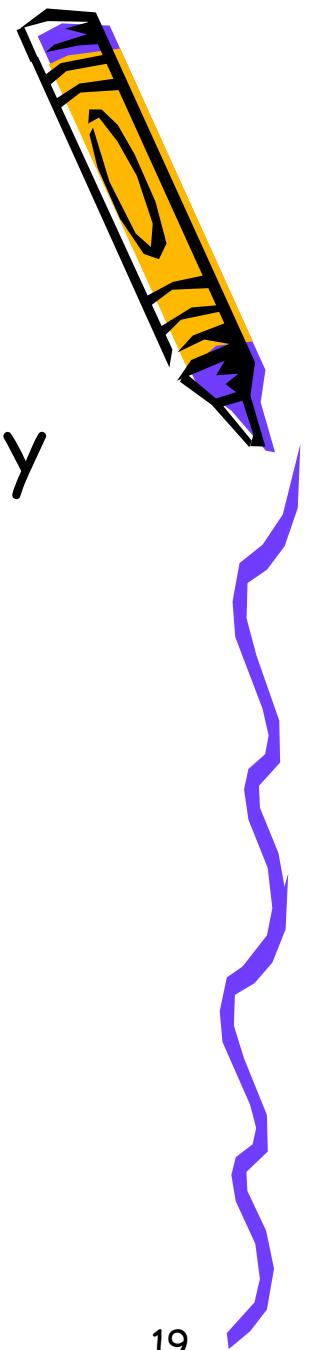
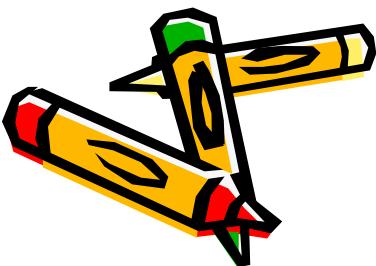
- Exercise 1
  - Set a goal or understand a gap in your skills
  - Do a SWOT by keeping that goal/gap in mind
  - Write down strategies to achieve the goal/gap
- Exercise 2
  - Write a reflective journal

Prepare a pdf with your student ID as the file name. Upload the pdf to course-web before midnight 16<sup>th</sup> February, 2020.

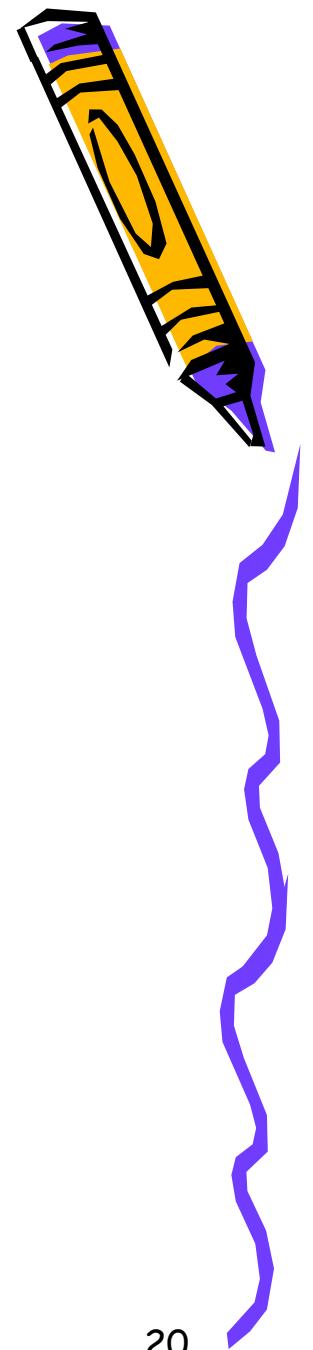
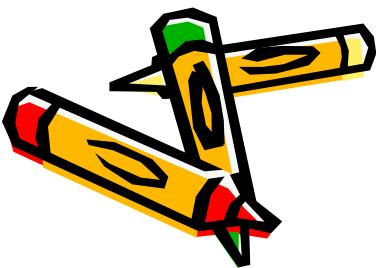


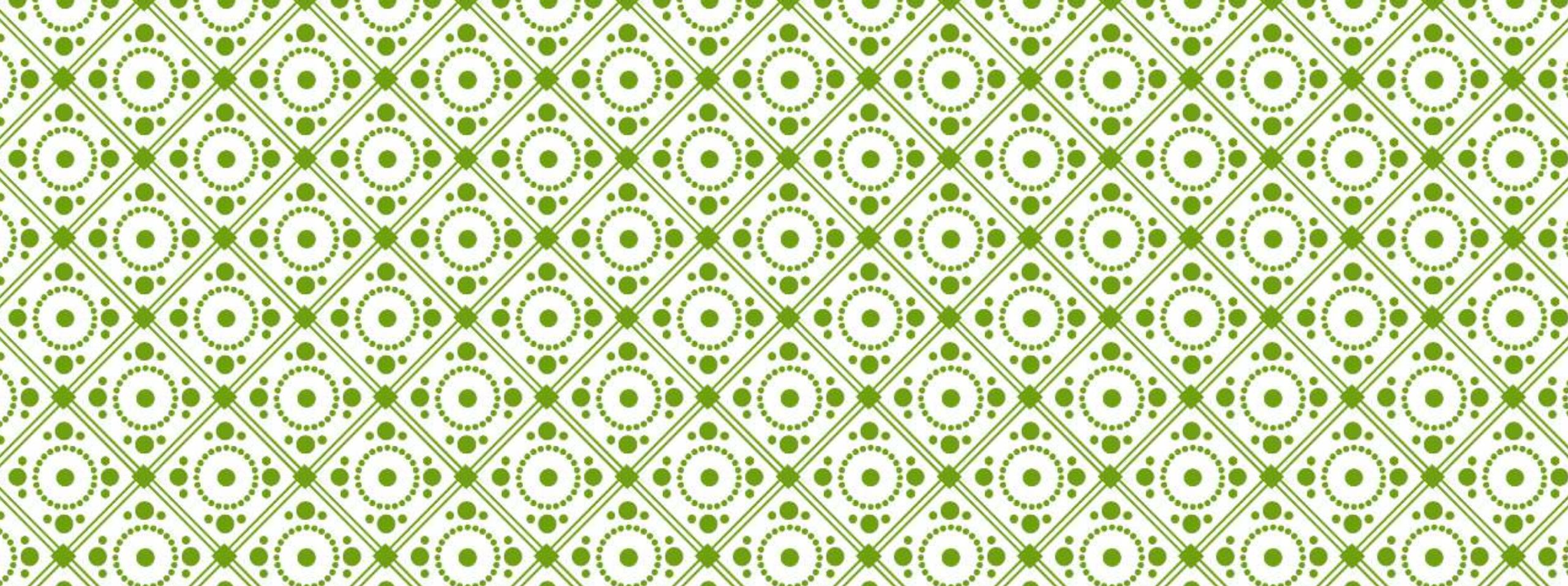
# Final Words

- Form a habit of doing this regularly when you see a gap in your skills
  - Or
- When you set a target for life



# Thank You





# VALUES, BELIEFS, ATTITUDES AND CHARACTER

Prof. Koliya Pulasinghe

# AGENDA

Values

Beliefs

Attitudes

Character

# VALUES: WHAT ARE THEY?

The principles that help you to decide what is **right** and **wrong**, and how to **act in various situations** – Oxford Dictionary

The importance of a value system is that once internalized it becomes, consciously or subconsciously, a standard or criterion for guiding one's action.

# FOUNDATION, FOCUS, AND FUTURE VALUES

## Foundation values:

- The values we need in place to have a solid foundation to our lives
- If our foundation values are threatened or if we are stressed, satisfying these values will demand most of our energy, pulling us away from our focus and future values.
- Who are habitually very stressed may live out much of their lives in this area.

# FOUNDATION, FOCUS, AND FUTURE VALUES

## Focus values:

These are those value priorities in our lives that describe,

- our present world view,
- our criteria for decision making,
- our attitude toward relationships, and
- the focus of most of our energy.

We therefore tend to be more aware of our focus values than we are of our foundation or future values.

# FOUNDATION, FOCUS, AND FUTURE VALUES

## Future values:

These represent what is important to us about the future we are moving into.

Because they are not yet fully developed, but at the same time are important to us, they motivate us to grow and develop – pulling us into the future every moment of our lives.

# VALUE OF VALUES

- ! When we practice, actualize or embody our priority values, we experience our lives as meaningful, significant and important.
- ! Values help us understand why we believe what we believe – and, if we wish, to change it.
- ! Shared values are the basis of relationship – the better we understand our own and others' values, the more likely we are to have meaningful and fulfilling relationships.
- ! If we value something, we will go after it – we will be motivated by it. Thus, if we understand our values, we also know what motivates us.
- ! Knowing our own values makes us more tolerant of others' values – and of them as people – and so leads us to appreciate diversity.

# VALUE OF VALUES

- ! Being aware of our values helps us answer some of the big coaching questions such as ‘Who am I?’ and ‘What is the difference I want to make?’
- ! Discerning our future values enables us to act more intentionally and move smoothly into future phases of our lives.
- ! Knowing our foundation values helps us deal better with difficulty and stress and return to equilibrium more quickly.
- ! Teams that are unaware of their value priorities will tend to operate at the lowest common denominator world view; self aware teams can operate at the highest common denominator

# BELIEFS



# BELIEFS

“Beliefs are constructs that we hold to be true, especially one without proof”

“Belief is the state of mind in which a person **thinks something to be the case with or without** there being **empirical evidence to prove** that something is the case with factual certainty”

-Wikipedia

# ATTITUDE

Attitude is a mindset or a tendency to act in a particular way due to both an individual's experience and temperament.

An attitude includes three components: an affect (a feeling), cognition (a thought or belief), and behavior (an action).

Although the feeling and belief components of attitudes are internal to a person, we can view a person's attitude from his or her resulting behavior.

# ATTITUDE

Attitudes may simply be an enduring evaluation of a person or object (e.g., “I like John best of my coworkers”), or

An emotional reactions to objects and to people (e.g., “I dislike bossy people” or “Jane makes me angry”).

Attitudes also provide us with internal cognitions or beliefs and thoughts about people and objects (e.g., “Jane should work harder” or “Sam does not like working in this department”).

Attitudes cause us to behave in a particular way toward an object or person (e.g., “I write clearly in patients’ charts because it upsets me when I can’t read someone else’s handwriting”).

# ATTITUDE

## Positive Attitude

Individuals who have a positive attitude will pay attention to the good, rather than bad in people, situations, events, etc.

Positive attitudes are rewarded. It means the individual is encouraged to do the same thing in future.

If we think positive thoughts we will surely experience such emotions as joy, love, gratitude, peace, and hope.

Having a “positive attitude” means a person believes everything happens for the best in the end.

## Negative Attitude

People with a negative attitude ignore the good and pay attention to the bad in people, situations, events, etc.

Negative attitudes are punished in order to discourage the same action in future.

If we think negative thoughts we will definitely have negative feelings such as anger, disappointment, irritation, envy, etc.

A person with a “negatives attitude” tends to believe their best days are in the past. There is nothing to “look forward to” and considers it a waste of time and energy.

# ATTITUDE

## **Positive Attitude**

It is an optimistic approach of a person to achieve good results.

It can achieve long-term goals easily and in time

It is a process of solving problems.

A person with a positive attitude pays attention to the virtues of others.

These persons always see opportunities.

## **Negative Attitude**

It is a pessimistic mindset of a person who is not capable of handling critical issues.

It can achieve some initial goals but not the long-term goals

It is a process of looking for problems.

A person with a negative attitude pays attention to other people's shortcomings.

These persons see only limitations.

# CHARACTER

Group of qualities that make a person, group or thing different from others.

What is “good character?” One definition is

1. “knowing the good, desiring the good and doing the good”; i.e., the head, the heart, the hand.
2. “understanding, caring about and acting on core ethical values such as honesty, responsibility, respect, hard work and caring for others.”

# HOW CHARACTER DEVELOPS

Your values shape your beliefs

Your beliefs shape your attitudes

Your attitudes shape your behaviors/actions.

Your behaviors/actions shape your habits

Your habits shape your character

Your character shapes your destiny

# VALUES EXERCISE

STEP 1: Start with a Beginner's Mind

STEP 2: Create Your List of Personal Values

STEP 3: Chunk Your Personal Values into Related Groups

STEP 4: Highlight the Central Theme of Each Value Group

STEP 5: Determine Your Top Personal Core Values

STEP 6: Give Your Personal Values Richer Context

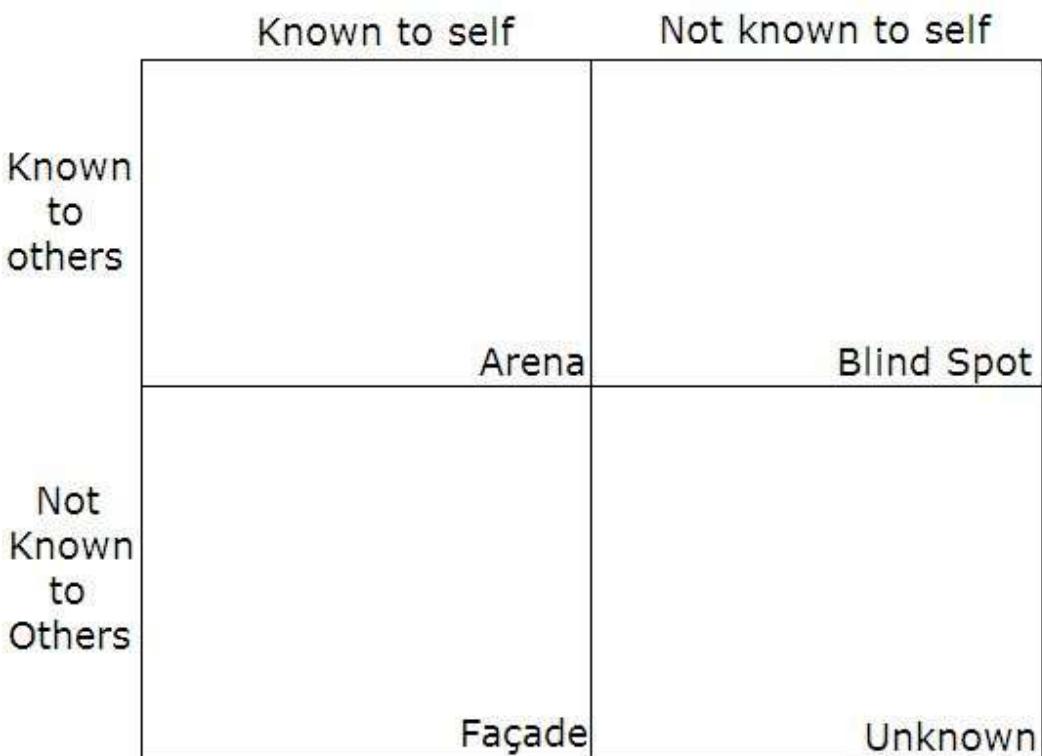
STEP 7: Test the Ecology of Each Value

# JOHARI WINDOW EXERCISE

Johari Window: A graphic model of awareness in interpersonal relations

Developed by Joseph Luft (1916–2014) and Harrington Ingham (1916–1995) in 1955

**Johari Window**



# CONCLUDING REMARKS

Knowing values, beliefs and attitudes helps us to develop a compelling character, to live a remarkable professional life

Industry always emphasize, “We hire individuals with good values and attitudes, because with those qualities, developing their technical skills is a simple task”

Know thyself – Socrates

Knowing yourself is the beginning of all wisdom – Aristotal

# EXERCISE

- Write “About Me” paragraph to a CV highlighting your core values. This may contain 5-6 Sentences (60~75 words).
- Complete Johari window exercise by getting feedback from your parents, friends, teammates, teachers
- Write a reflective journal on an incident/situation in real life that you faced where content discussed in this lecture will be useful/can be put into practice
- Submit your assignment on or before midnight 23<sup>rd</sup> February, 2021

# Teams for Teamwork



Professional Skills  
Lecture 03

# What is a team ?



- ❖ “Two or more freely interacting people with shared norms, goals, and with a common identity“ (**Kreitner & Kinicki, 2003**)
- ❖ “A team is a group of people working toward a common goal.”

# A team can be..

- Large – (20-30)

Ex: IT Department Lecturers, Senate

- Small - (2-5)

Ex: Board of Directors, Surgeons of a surgery

- Short Term

Ex: event committee

- Long Term

Ex: Parliament standing committee for Public Relations



# Team Development Stages

- There are four stages to group development
  - Forming
  - Storming
  - Norming
  - Performing
  - Adjourning

- Dr. Bruce Tuckman

# Team Development Stages

Bruce Tuckman(1965) five stages of group development

## Forming

Team acquaints and establishes ground rules. Formalities are preserved and members are treated as strangers.



## Storming

Members start to communicate their feelings but still view themselves as individuals rather than part of the team. They resist control by group leaders and show hostility.



## Norming

People feel part of the team and realize that they can achieve work if they accept other viewpoints.



## Performing

The team works in an open and trusting atmosphere where flexibility is the key and hierarchy is of little importance.



## Adjourning

The team conducts an assessment of the year and implements a plan for transitioning roles and recognizing members' contributions.



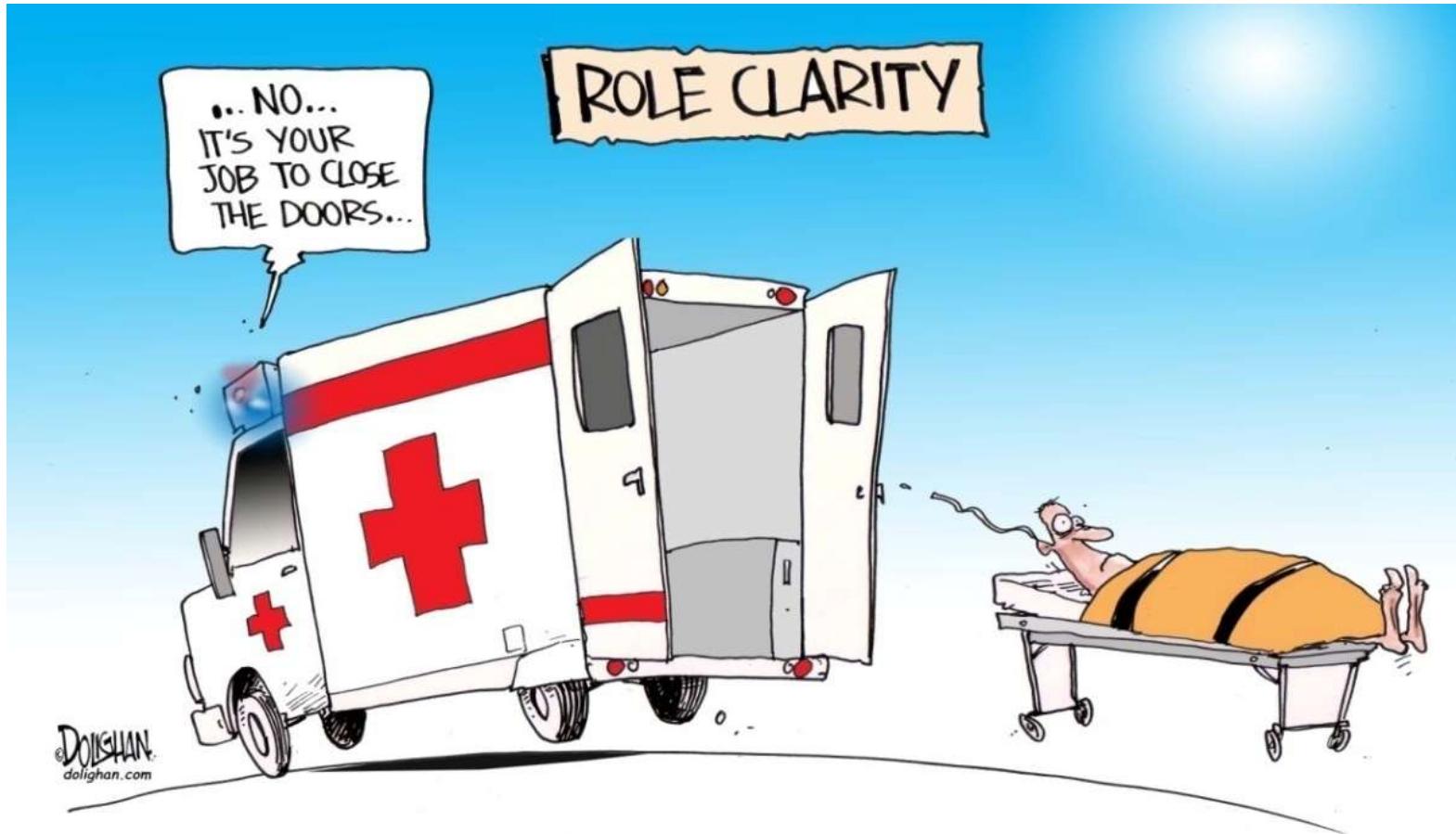
# What is a Team Role?

- A Team Role came to be defined as:

“A tendency to behave, contribute and interrelate with others in a particular way.”

**-Dr Meredith Belbin**

# Role



# Role

- *Set of behaviors required or expected of the person occupying a certain position in a group.*
- There are two types of roles :
  1. Formal Role - dictated by the structure of the organizations (coach, team captain).
  2. Informal Role - evolve from the group's dynamics.
- Role Acceptance - important to enhance a group's structure.

# Belbin Team Role Theory

- The nine team roles
    1. Plant
    2. Monitor Evaluator
    3. Specialist
    4. Coordinators
    5. Resource Investigators
    6. Team workers
    7. Implementers
    8. Shapers
    9. Completer-Finishers
- Thought Focused Roles
- 
- People Focused Roles
- 
- Action Focused Roles
- 

# Problems with Roles

- Role Overload
- Role Conflict
- Role Ambiguity
- Rigidity
- Territoriality
- Abdication
- Human Nature

# Problems with Roles

- Role Overload :
  - This can leave the member exhausted, attempting to get more done in less time.
  - Stress builds and productivity falls.
  - Personal defeat can isolate the member from the group and shatter communication.



# Problems with Roles

- Role Conflict :
  - This is when the members of a group each have a different expectation of another's responsibilities.
  - This person will feel torn and unable to come to terms with the group identity, which can also occur when there is a moral or ethical dilemma with another of the group.

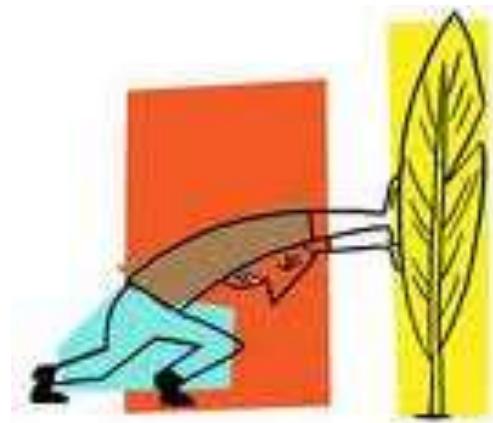


# Problems with Roles

- Role Ambiguity :
  - This is when a role is left too vague or undefined, and the individual does not know what is expected of them by the group.
  - Members experiencing role ambiguity find their self confidence drops and due to that efficiency slows to a crawl.
  - Without an identity relative to the other group members, an individual cannot perform and they will often isolate and shy away from the other group members.

# Problems with the Role Concept

- Rigidity:
  - Sometimes prevents flexibility, other potentials



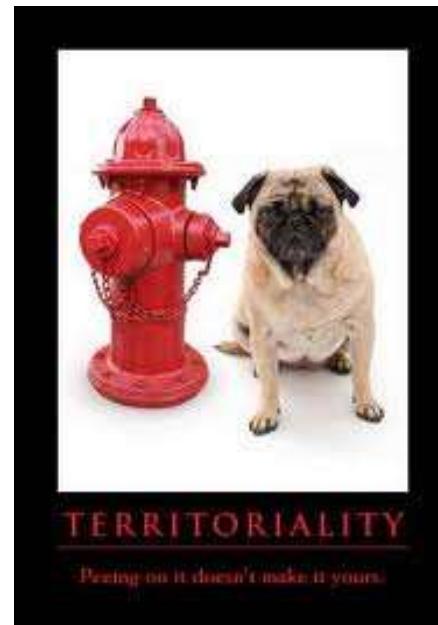
# Problems with the Role Concept

- Abdication:
  - Avoiding contributing within another's role just because it is someone else's responsibility



# Problems with the Role Concept

- Territoriality:
  - Reluctance to get contribution from others to the role assigned to someone, Guard his role/personal space



# Problems with the Role Concept

- Human nature:
  - The annoying habit of being unpredictable, straying from expected role and inconsistency in same role across the individuals



# Handling the problems

- *Solid, unemotional discussion*
- *Role re-delegation* until responsibilities have settled comfortably on the correct person.
- *Self-evaluation* and *Personality testing* can also aid in correct role placement and determination, such as :
  - Howard Gardner's multiple intelligences test (Carter, Bishop, & Kravits, , Key 2.1, Key 2.2).



# Alternative to the Role Concept

- Empowering
  - Focus on *Multiskilling* people (all-rounders)



# Successful team

- Works together toward common goals
- Perceive relevance of the group tasks
- Mutual respect for members
- Diversity of member skills/experience
- Individual communication style



# Conclusion

- When people come together as a team, share a dream, and focus on reaching their goals together, there's a very good chance they'll accomplish what they set out to do!





# Team Leadership

PROF. KOLIYA PULASINGHE

# Agenda

- ▶ What is leadership?
- ▶ Identify the traits and skills of an effective leader
- ▶ Key leadership theories
- ▶ Examine the role, duties and responsibilities of a Team Leader
- ▶ Understand the limits of authority in a Team Leader role
- ▶ Develop a plan to develop your own leadership potential

**Most parts of this lecture is taken from University of Exeter, UK – Leadership Skills module**

# What is Leadership?

*"Leadership is a function of **knowing** yourself, having a **vision** that is well communicated, **building trust** among colleagues, and **taking effective action** to realize your own leadership potential."*

Prof. Warren Bennis

# Leadership Theories

## **Early Theories:**

### **Great Man Theories**

- ▶ Leaders are exceptional people, born with innate qualities, destined to lead
- ▶ Term 'man' was intentional - concept was primarily male, military and Western

### **Trait Theories**

- ▶ Research on traits or qualities associated with leadership are numerous
- ▶ Traits are hard to measure. For example, how do we measure honesty or integrity?

# Leadership Traits and Skills

## Traits

- ▶ Adaptable to situations
- ▶ Alert to social environment
- ▶ Ambitious and achievement orientated
- ▶ Assertive
- ▶ Cooperative
- ▶ Decisive
- ▶ Dependable
- ▶ Dominant (desire to influence others)
- ▶ Energetic (high activity level)
- ▶ Persistent
- ▶ Self-confident
- ▶ Tolerant of stress
- ▶ Willing to assume responsibility

## Skills

- Clever (intelligent)
- Conceptually skilled
- Creative
- Diplomatic and tactful
- Fluent in speaking
- Knowledgeable about group task
- Organised (administrative ability)
- Persuasive
- Socially skilled

Stogdill, 1974

Leaders will also use:

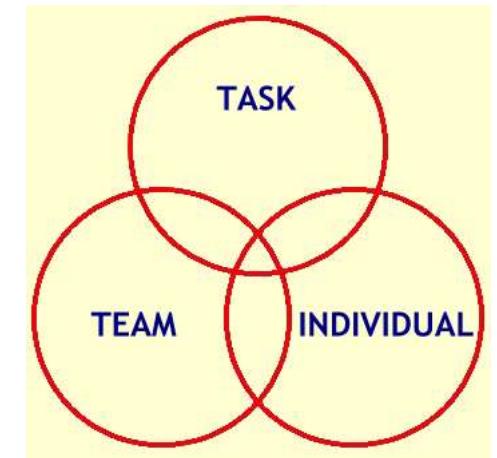
Integrity, Honesty, Compassion,  
Humility

# Leadership Theories

**Functional Theories** (John Adair, Action Centred Leadership, 1970)

Leader is concerned with the interaction of 3 areas:

- ▶ **Task** – goal setting, methods and process
- ▶ **Team** – effective interaction/communication, clarify roles, team morale
- ▶ **Individual** – attention to behaviour, feelings, coaching, CPD



# Leadership Theories

**Behaviourist Theories** (Blake and Mouton, Managerial grid, 1964)

- Leaders behaviour and actions, rather than their traits and skills  
e.g. production orientated or people orientated
- Different leadership behaviours categorised as 'leadership styles' e.g. autocratic, persuasive, consultative, democratic
- Doesn't provide guide to effective leadership in different situations

# Leadership Theories

## Situational/contingency Leadership (*Hersey-Blanchard, 1970/80*)

Leadership style changes according to the 'situation' and in response to the individuals being managed – their competency and motivation

Competency	Low competence	Some competence	High competence	High competence
Motivation	Low commitment/ Unable and unwilling or insecure	Variable commitment/ Unable but willing or motivated	Variable commitment/ Able but unwilling or insecure	High commitment/ Able and willing or motivated
Leadership style	<b>DIRECTIVE (Telling)</b>	<b>COACHING (Selling)</b>	<b>SUPPORTIVE (Participating)</b>	<b>DELEGATORY (Observing)</b>

# Leadership Theories

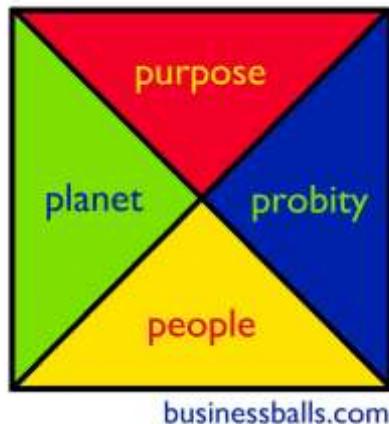
## **Transformational Theory** (Bass and Avolio, 1994)

- ▶ Leaders inspire individuals, develop trust, and encourage creativity and personal growth
- ▶ Individuals develop a sense of purpose to benefit the group, organisation or society. This goes beyond their own self-interests and an exchange of rewards or recognition for effort or loyalty.

# Leadership Theories

## Ethical Leadership (Alan Chapman, 2006)

- ▶ CSR, sustainability, equality, humanitarianism
- ▶ Four P's - Purpose, People, Planet, Probitity



# Key Team Leader Responsibilities

1. **Guide/coordinate team** members – encourage teamwork and motivate individuals
2. **Provide structure** for team – set mission and purpose, clarify roles and responsibilities, allocate tasks and set objectives
3. **Clarify working methods**, practises and protocol
4. **Focus on performance** – anticipate challenges, monitor performance, delegate and provide CPD support

# Accountability, Responsibility, and Authority

- ▶ Accountability the state of being accountable, liable, or answerable
- ▶ Responsibility (for objects, tasks or people) can be delegated but accountability can not – buck stops with you!
- ▶ A good leader accepts ultimate responsibility:
  - ▶ will give credit to others when delegated responsibilities succeed
  - ▶ will accept blame when delegated responsibilities fail
- ▶ Accountability can not operate fairly without the leader being given full authority for the responsibilities concerned
- ▶ Authority is the power to influence or command thought, opinion or behaviour
- ▶ Cross-functional team – less authority - more difficult to manage

# How to improve your leadership skills

- ▶ Reflect and identify the skills YOU need to lead effectively and create your action plan to develop them
- ▶ Ask for feedback from work colleagues, line managers, tutors, your 'followers'
- ▶ Practise! Take on responsibility (work, volunteering, clubs & Societies) and reflect on your performance
- ▶ Find a mentor – learn from positive leadership role-models
- ▶ Attend further leadership and management training

# Review your performance as a leader

Exercise:

1. Assess yourself as a Leader
  - Conduct a SWOT analysis - Strengths, Weaknesses, Opportunities, Threats
2. Develop an Action Plan to improve as a leader
  - list 2 actions you will undertake to address Weaknesses or capitalise on Opportunities identified
  - Apply SMART targets to your actions – Specific, Measurable, Achievable, Realistic, Time-bound
3. Write a reflective journal about one of the Leadership experiences you faced with a team or in your life

Submit your assignment on or before midnight 9<sup>th</sup> March, 2021 (Next Tuesday).

# **DECISION MAKING**

Prof. Koliya Pulasinghe

# Aim of the Lecture

## What is the aim?

- *Aim of the lecture is*
  - to **provide** teams with
    - *theoretical frameworks,*
    - *strategies* and
    - *tools*

that they can be used **when** they are making **decisions**.

# Decision

- Decision -

"the act of making up your **mind** about something, or a position or opinion or judgment reached after consideration"



The word "DECISIONS" is written in large, bold, red letters. The letters are slightly slanted and have a three-dimensional appearance. Red arrows are drawn around the word: one arrow goes from the top left of the 'D' to the bottom right of the 'N'; another arrow goes from the bottom left of the 'D' to the top right of the 'N'; a third arrow goes from the top of the 'I' down to the bottom of the 'I'; and a fourth arrow goes from the bottom of the 'S' up to the top of the 'S'. These arrows create a continuous loop that encircles the entire word.

# Decision Making

- The cognitive process of reaching a decision.
- A position or opinion or judgment reached after consideration
- Choosing between alternative courses of action using cognitive processes - memory, thinking, evaluation, etc.
- The Process of mapping the likely consequences of decisions, working out the importance of individual factors, and choosing the best course of action to take

In a Team ;

- *Process through which team selecting alternatives which are important for **Team Performance***

# Decision Making

Why we need to learn this?

- *To make informed choices in team decision making processes*
- *To get everyone involved in the decision-making process*
- *To justify your decisions to different audiences*

# Decision Making is a Logical and Systematic Process

- Create a constructive environment - (Goal/Right People/Opinions)
- Generate good alternatives - (Ideas/Different Perspectives/Organize Ideas)
- Explore these alternatives - (Risks/Impacts/Validations)
- Choose the best alternative - (Grid Analysis/Decision Trees)
- Check your decision.
- Test assumptions & Decisions with own Experience
- Check for Common Decision Making Problems
- Check the Logical Structure of the Decision
- Communicate your decision, and take action

# Decision making

Three main areas that support systematic process are:

- 1. *Environments for decision making*
- 2. *Methods for decision making*
- 3. *Tools for decision making*

# Environments for Decision Making



# Features of a Thinking Environment

1. Attention
  - *listening with respect, interest and fascination to your team members*
2. Incisive Questions
  - *removing assumptions that limit ideas*
3. Equality
  - *treating each team member as a thinking peer*
4. Appreciation
  - *practicing a 5:1 ration of appreciation to criticism of your teammates and their ideas*
5. Ease
  - *ease creates. Urgency destroys*

# Features of a Thinking Environment

6. Encouragement
  - *moving beyond competition with your teammates to collaboration*
7. Feelings
  - *allowing sufficient emotional release to restore thinking*
8. Information
  - *providing a fuller, more accurate picture of reality*
9. Place
  - *creating a physical environment that says 'You matter'*
10. Diversity
  - *adding quality because of the differences between participants*

# Methods for Decision Making

- *Understanding the decision-making methods will help you to make the best decision available.*
  - *Best Decision*
    1. *would not have been thought of by an individual alone*
    2. *a sound solution to the problem*
    3. *a decision based upon input, as unbiased as possible, from each team member*
    4. *addresses the team's goal for the decision-making process.*
  - *Methods describe how we work, how they affect and manipulate the team decision making process in productive ways.*

# Methods of Decision Making

## 1. Decision by consensus

*Time available allows a consensus to be reached; the team is sufficiently skilled to reach a consensus; the team commitment required to implement the decision is high.*

## 2. Decision by majority vote

*Time constraints require decision; group consensus supporting voting process; team commitment required to implement decision is moderately high.*

## 3. Decision by minority vote (EXCO)

*Limited time prevents convening entire team; clear choice of minority group; team commitment required to implement the decision is moderately low*

# Methods of Decision Making

## 4. Decision made by authority after group discussion

*Available time allows team interaction but not agreement; clear consensus on authority; team commitment required to implement decision is moderately low.*

## 5. Decision by averaging individuals' opinions

*Time available for decision is limited; team participation is required, but lengthy interaction is undesirable; team commitment required to implement the decision is low.*

## 6. Decision by expert

*Highly dependent on specific expertise, clear choice for expert*

## 7. Decision made by authority without group discussion

*Simple, routine, administrative decisions; little time available to make decision;*

# Tools for Decision Making

- Why we need tools?

In addition to creating an environment for effective decision making and using methods for making decisions as a team, tools can assist teams in formulating and reaching decisions.



# Tools to assist teams for Decision Making

- Brainstorming
- Brainstorming is a group **creativity technique** by which efforts are made to find a conclusion for a specific problem by gathering a **list of ideas spontaneously contributed** by its members

Wikipedia



# Tools to assist teams for Decision Making

- Affinity Grouping
- Grouping unstructured ideas (Generated from Brainstorming) based on their natural relationship



# Tools to assist teams for Decision Making

- Multi-voting
- The multi-voting technique holds an answer to your problems when decision making becomes tough, because of too many options/alternatives.
- Process: Each member is given many votes (Ex: 1/3 of the options), Run it many rounds.

## Multivoting Example First Vote Tally

I	A. No agenda	I	I. Problems not mentioned
IIII	B. No clear objectives	III	J. Interrupted by phone calls
II	C. Going off on tangents	II	K. Few meaningful metrics
I	D. Extraneous topics	IIII	L. Interrupted by visitors
II	E. Too many "sea stories"	III	M. No administrative support
III	F. Vital members missing from meeting	IIII	N. Meetings extended beyond allotted time
III	G. Not enough preparation for meetings	IIII	O. Members distracted by pressing operations
IIII	H. Too much "dog and pony"	P	P. Unclear charts

Lack of Meeting Productivity

# Tools to assist teams for Decision Making

- Criteria Matrix
- A decision matrix is a list of values in rows and columns that allows an analyst to systematically identify, analyze, and rate the performance of relationships between sets of values and information. Elements of a decision matrix show decisions based on certain decision criteria.

Wikipedia

Weighted Decision Matrix							
Criteria	Weighting	OPTIONS					
		Option 1		Option 2		Option 3	
Criteria 1	1	1	1	5	5	5	5
Criteria 2	2	2	4	4	8	5	10
Criteria 3	3	3	9	3	9	5	15
Criteria 4	4	4	16	2	8	5	20
Criteria 5	5	5	25	1	5	5	25
TOTAL:			55		35		75

# Tools to assist teams for Decision Making

- Six Thinking Hats:
- Looking at a decision from a range of different perspectives



**White Hat**

Data, facts, information known or needed



**Red Hat**

Feelings, hunches, instinct and intuition



**Black Hat**

Difficulties, potential problems, why something may not work



**Yellow Hat**

Values and benefits, why something may work



**Blue Hat**

Manage process, next steps, action plans



**Green Hat**

Creativity, solutions, alternatives, new ideas

# Important issues of Decisions

Every Decision must address two issues:

1. Merit Dimension – Merits of the decision in some quantitative way
2. Acceptance Dimension – People affected by the decision will accept it

# DM in Project Teams (continue...)

## Advantages of Team Decision Making

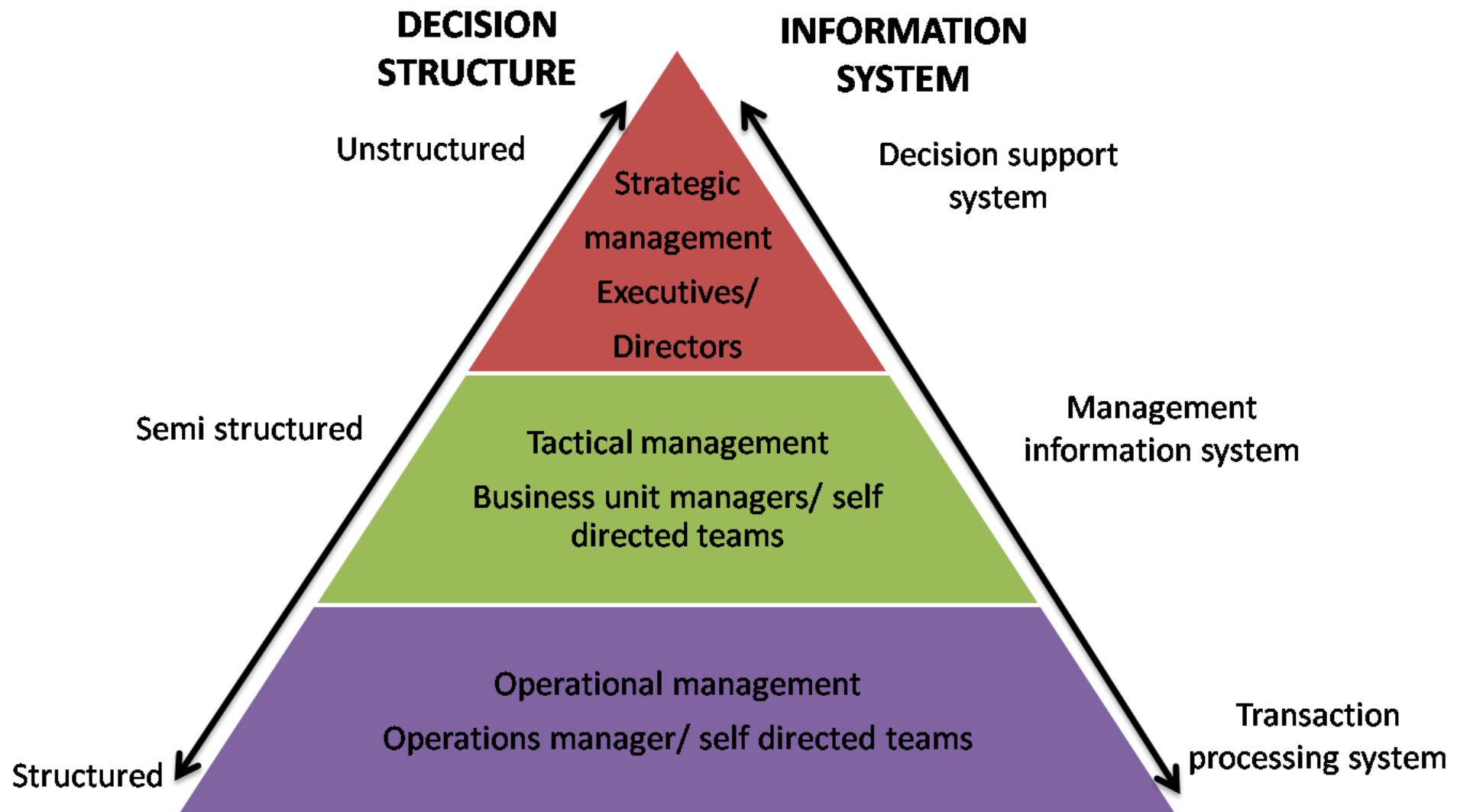
1. **Greater Knowledge:** because of the number of people involved, each with differing experience, knowledge, points of view and values, a larger number and variety of ideas for solving a problem can be produced.
2. **Shared responsibility:** makes individuals more willing to take risks. The discussion of different points of view also helps the group to be more realistic in assessing the risks associated with particular courses of action.
3. **Higher commitment:** individuals who have contributed to finding a solution feel a greater commitment to its successful implementation.

# DM in Project Teams (continue...)

## *Weak Points of Team Decision Making*

1. **Time consumption:** group problem solving is a relatively slow process compared with working alone.
2. **Less recognition:** identifying who really did his/her best is difficult to recognize as it is a collaborative effort thus, less chance for recognition for promotion
3. **Conformity:** there is a strong tendency for individuals in a group to want to conform to the consensus. This can be due to a variety of reasons, including the need to feel valued or respected.

# Decision Making and Information Systems



## Exercise:

1. Have a group discussion with your ITP team members about what tools you have already used when you decide on technology/technologies to implement ITP Project.
  2. Write a reflective journal about one of the decisions you have made in academic life. Discuss what tools you have used to make that decision. If you face the same situation, discuss how this lecture would help you.
- 
- Submit your assignment on or before midnight 23<sup>rd</sup> March, 2021.

# Embracing diversity in teams, organization and society



Prof. Koliya Pulasinghe

# Embrace



Embrace: hold (someone) closely in one's arms, especially as a sign of affection

**Inclusion** is a sense of belonging. Inclusive cultures make people feel respected and valued for who they are as an individual or group.



Team Diversity & Performance |

# What is team Diversity?

Team Diversity is the significant uniqueness of each individual on a team

This includes,

- ✓ Religion
- ✓ Gender
- ✓ Age
- ✓ Race

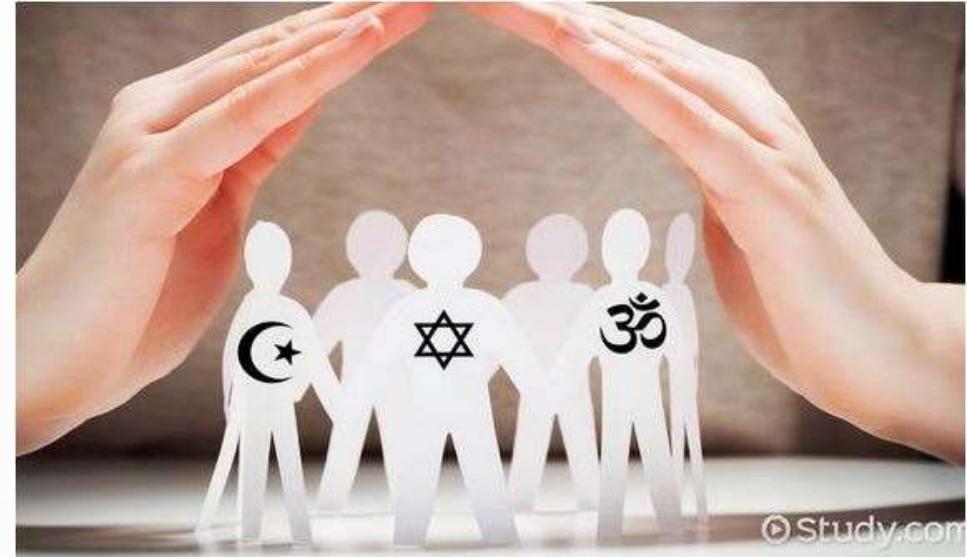
Also

- ✓ Introverts
- ✓ Extroverts
- ✓ Liberals
- ✓ Conservatives

# Religious Diversity

## Religion

It will bring lot of benefits by getting many view points in decision making.



But this is the most challenging diversity aspect to handle.

It has to be effectively managed by:

- Training all employees to educate company policy

- Be fair in giving time for religious observations

- Encourage employees to accept differences

- Avoid overacting to simple things and not to tolerate serious issues

# Gender Diversity

## Gender

- Gender Diversity offers many benefits such as:
  - Widen organization's (team's) talent pool
  - Bring multiple perspectives
  - Enhanced collaboration
  - Improve staff retention
  - Better understand customer needs
  - Improve organization's (team's) reputation
- Gender communication issues can strongly affect team interactions.
- Gender communication issues can range from communication styles and perceptions, opportunities and even sexual harassment.



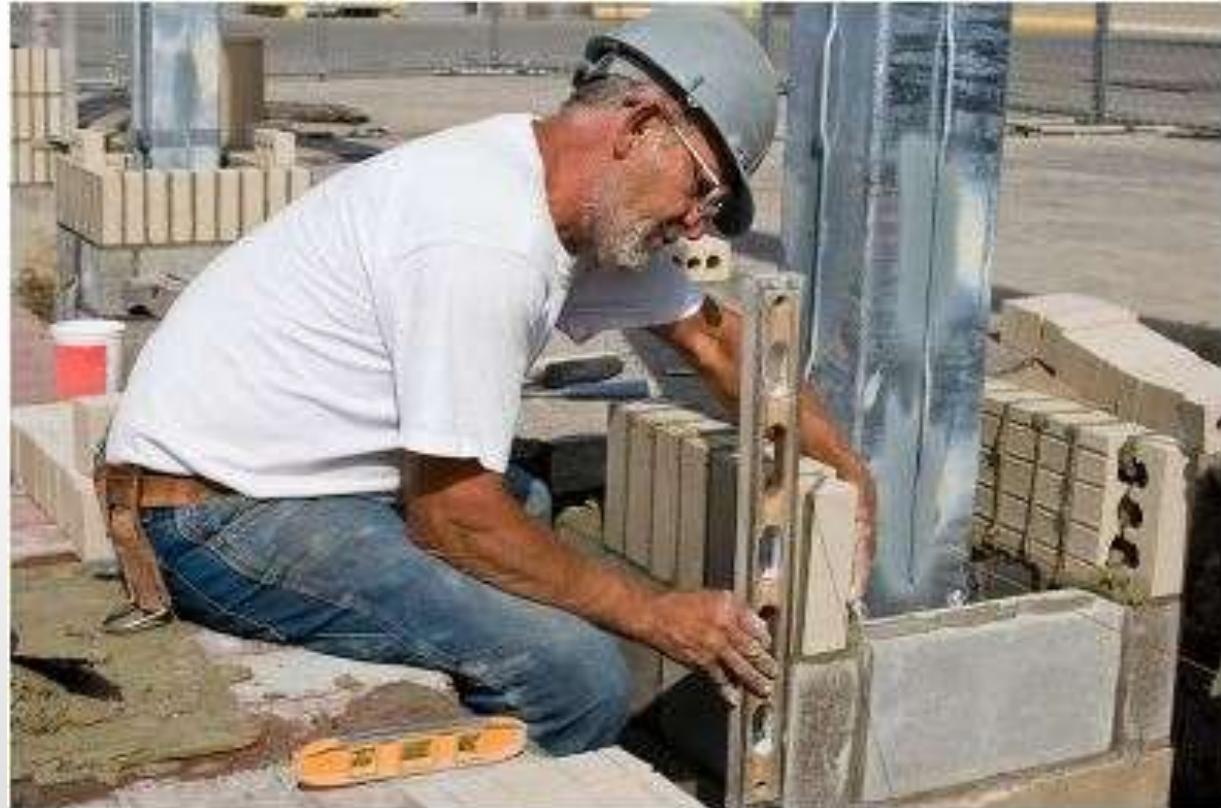
# Age Diversity in a Team

- Age Diversity
  - Brings different mindsets, increase flexibility of team members, decisions are well rounded because of diversity in opinions, Mutually get trained, strengthen new ideas and fast execution, work-life balance



# IMPORTANCE OF OLD WORKERS

1. Dedicated
2. Punctuality
3. Honesty
4. Detail-oriented,
5. Good listeners
6. Pride in a job
7. Organizational skills
8. Efficiency
9. Maturity
10. Communication skills



<https://www.entrepreneur.com/article/167500>

# Why need young people

- New energy and perspective

Young employees can bring fresh perspective and a different way of thinking to your business.

- Workforce development

They have just come out of school or tertiary education they will still retain a mindset that will help them absorb training more readily.

- Affordability

More often than not, wages for a young employee are less expensive than those for an older more experienced worker.



# Why need young people

- Tech advancement & early adoption

Millennials have grown up around technology. Their natural affinity for tech and their ability to apply and understand different technologies quickly sets them apart from other generations in the workforce.

- Adaptability & agility

When unexpected circumstances arise, younger people are better equipped to respond to sudden change . – Science Daily, 2011 .

# Culture

## Culture

- Culture refers to the standards of social interaction, value and beliefs from a given group of people.
- Cultural issues can affect team interactions through different understandings of communication or family and can appear to be an excuse for preferential treatment.

# Race and Disabilities

## Race

- Race is defined as a group of people, often of a common geographic origin, that share genetically transmitted physical characteristics. Racism is the belief that these inherited characteristics affect an individual's behavior or abilities.

## Disabilities

- Differences in ability often create difficulties in communication and emotional interactions. Whether it is a deaf individual not being able to communicate with hearing individuals, or a hearing individual being unsure of how to approach a deaf individual, disabilities present a variety of issues in team organizations

# Benefits of Diversity in the Workplace

Here are a few of the top benefits of diversity in the workplace.

- 1) Talents, skills and experiences.
- 2) It creates innovation.
- 3) Language skills can open doors for a business.
- 4) It grows your talent pool.
- 5) Improves employee performance.

# Challenges of Diversity in the Workplace

- Discrimination
- Stereotyping and preconception
- High turnover rate
- Absenteeism
- Conflicts in team members
- Increase tension
- Productivity Decrease

# Discrimination

- Discrimination means treating a person unfairly because of who they are or because they possess certain characteristics.
- The Equality Act 2010 highlights 9 protected characteristics:

- Age
- Gender
- Race
- Disability
- Religion
- Pregnancy and maternity
- Sexual orientation
- Gender reassignment
- Marriage and civil partnership



# WHAT IS STEREOTYPING?



Stereotyping is defined as an "oversimplified, usually pejorative, attitude people hold toward those outside one's own experience who are different."



A stereotype is simply a widely held belief that an individual is a member of a certain group based on characteristics.



**Stereotypes are functional:** As audience members we are bombarded with much more information than we can process.



**Stereotypes are results of selectivity in social perception:** We tend to see what we expect to see



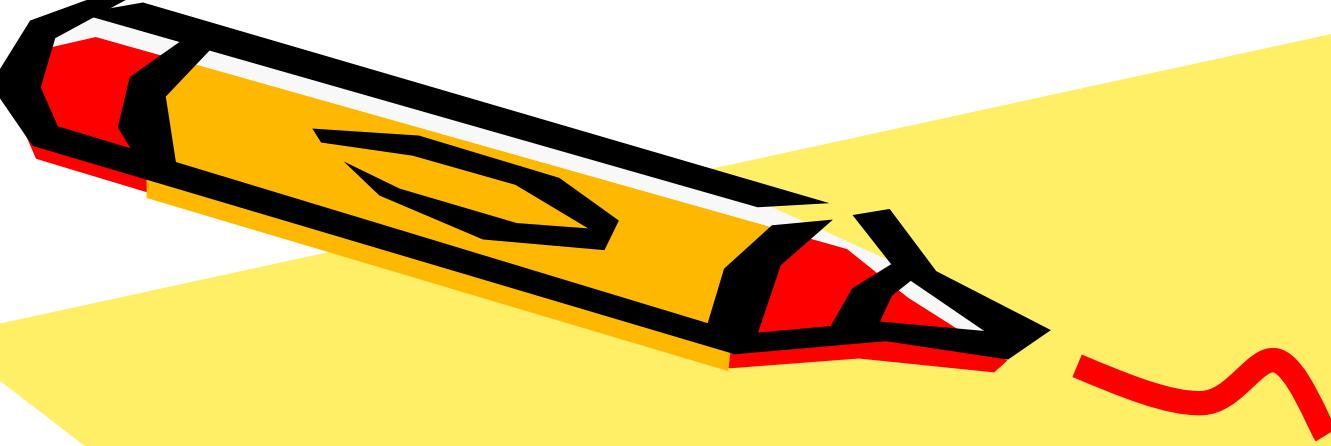
**Prejudice:** This is the most influential factor in stereotyping. Our perceptions are highly subjective, and many people subscribe to derogatory descriptions of ethnic groups.

# How to overcome diversity Issues:

- Planning and Implementation
  - Business managers, must be able to plan and execute a diversity plan. This involves mapping out a way to create an appreciation for diversity in all employees in your office.
- Conflict Resolution Skills
  - An essential tool to managing workplace diversity is the ability to handle conflict. Disagreements that arise because of cultural differences must be handled promptly and swiftly as to not decrease productivity in the workplace.
- Communication
  - Good communication is one of the best ways to manage diversity in the workplace. Encourage your employees to share concerns as they arise. Every employee should feel equally important to the company.

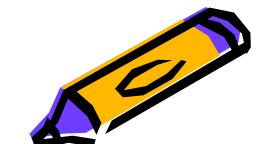
# Exercise:

- Analyze your team based on factors like:
  - Gender
  - Religious belief
  - Those who attended to mixed schools, Girls/Boys schools
  - From Western Province, Outside
- Discuss how you can get those differences for the benefit of project's success
- Write a reflective journal about one of the diversity experience or issue, you faced with your project team or in your life
- Submit your assignment as a PDF on or before midnight 06<sup>th</sup> April, 2021.



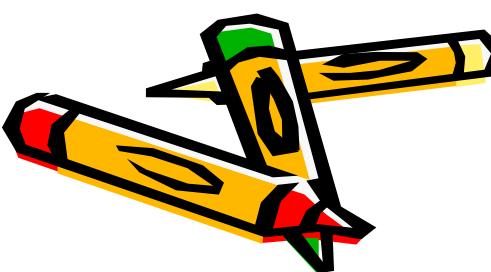
# Time Management

Prof. Koliya Pulasinghe



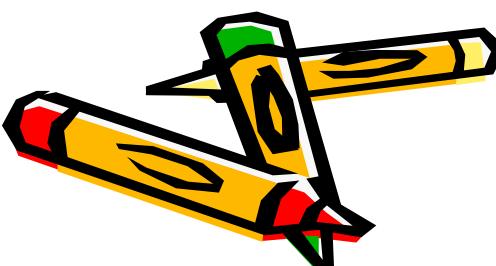
# Agenda

- Time Management: What? Why?
- Tracking Your Time
- Goal Setting and Structuring Time
- Planning for the Semester
  - the Week
  - the Day
- Stress Reduction Tips



# Time Management

- Balancing Academic, Family & Social Life
- Less in-class time and more outside work related to class work
- To complete all tasks on time with minimum personal stress



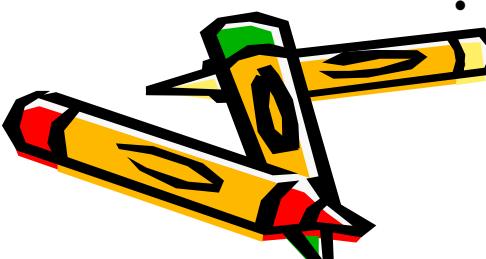
# Advantageous of Time Management

- gain time
- motivates and initiates
- reduces avoidance
- promotes review
- eliminates cramming
- reduces anxiety

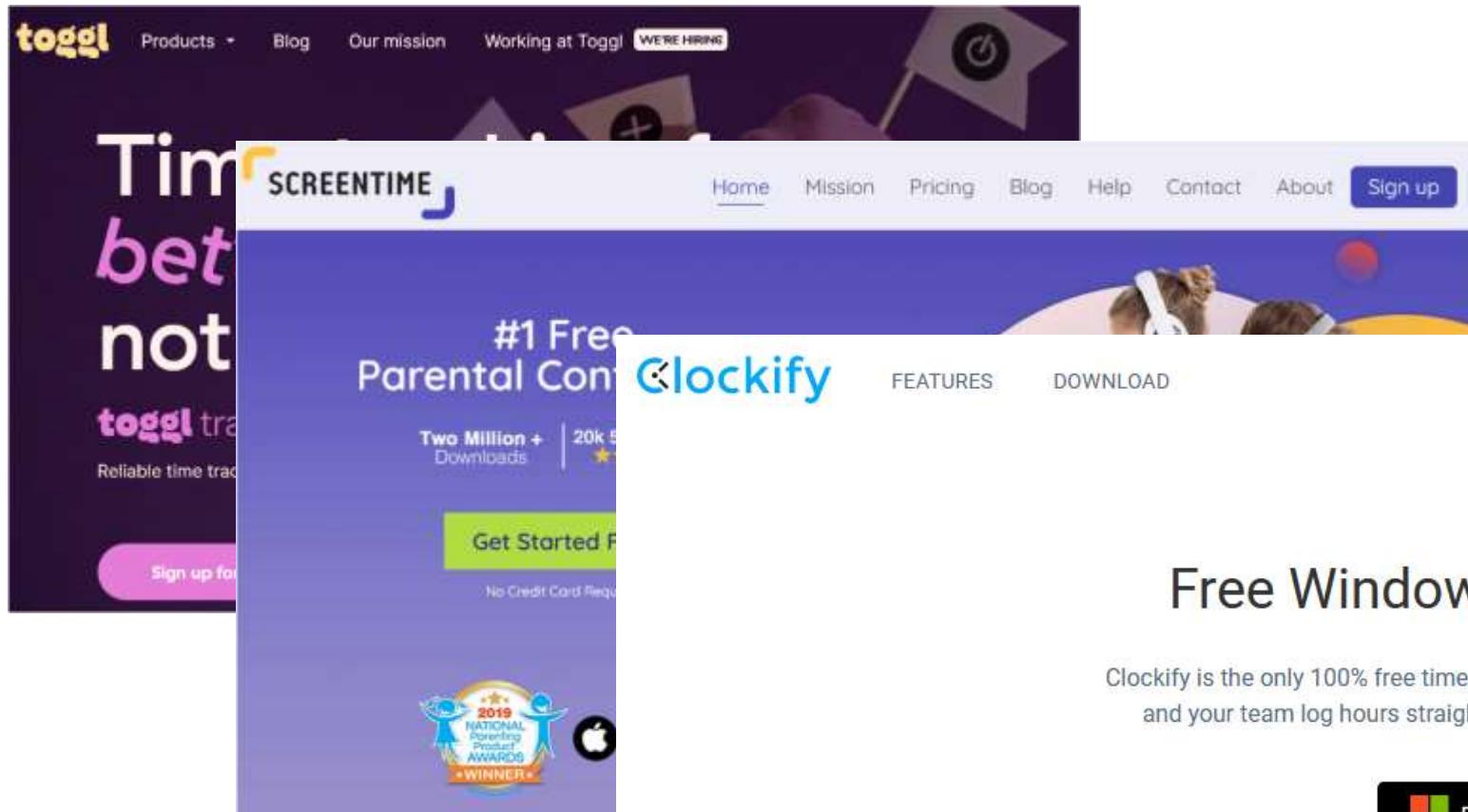


# Task 1: Track Your Time

- Number of hours of sleep each night        X 7 =
- Number of grooming hours per day        X 7 =
- Number of hours for meals/snacks per day - include preparation time        X 7 =
- Total travel time weekdays        X 5 =
- Total travel time weekends
- Number of hours per week for regularly scheduled functions (clubs, prayers, get-togethers, etc.)
- Number of hours per day for chores, errands, extra grooming, etc.        X 7 =
- Number of hours of work per week
- Number of hours in class per week
- Number of average hours per week socializing, dates, etc.
- Now add up the totals:  
Subtract the above number from 168: 168 -     =



# Task 1: Track Your Time



## Free Windows time tracker

Clockify is the only 100% free time tracking app for Windows that lets you and your team log hours straight from your desktop while working.



[Download portable version](#)

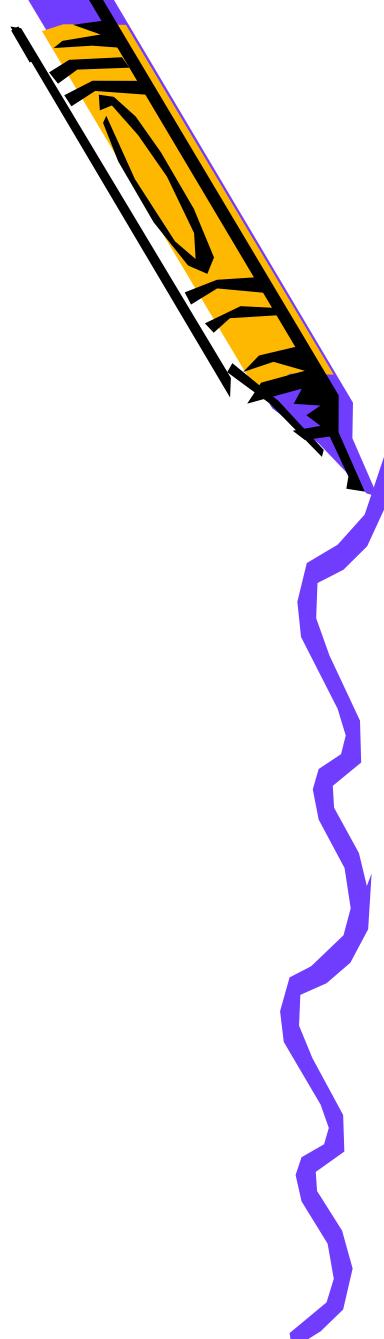
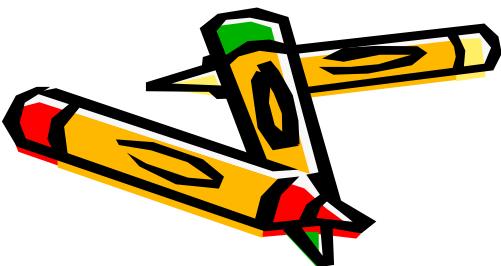
[Don't have an account? Sign up free](#)

[Looking for screenshot recording app?](#)

# Motivation: Goal Setting

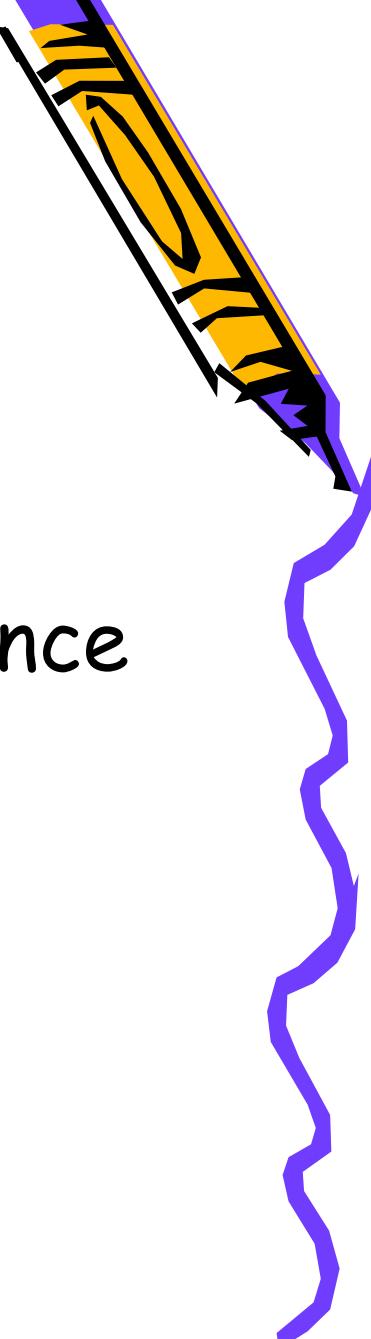
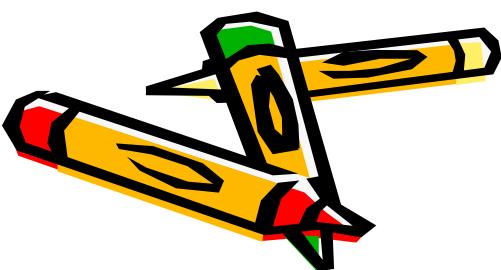
*If you don't know where you're going you'll end up somewhere else anonymous.*

- To be motivated, you need to have **a goal**
- No one else can force you to become motivated; it has to come from **you**
- Goals can be **long-term**, **medium-term** and **short-term**



# Example: Getting Better Grades

- Grades tell “to what extent you achieved the knowledge and skills required” to be a graduate
- GPA/Average reflects your academic performance
- Good GPA/Average and soft skills make you a better graduate



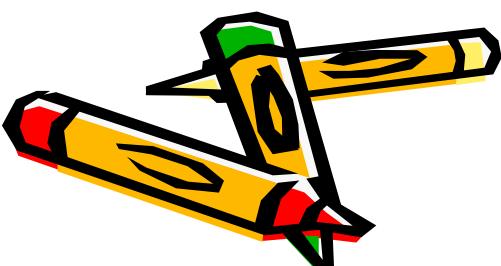
# Structuring Your Time

	Urgent	Not Urgent
Important	<b>Group 1</b> Important & urgent  Prioritise and complete these tasks first. Is everything in this group important for your business success?	<b>Group 2</b> Important, not urgent  Prioritise list & plan time in your diary to do them. Break large tasks down into manageable chunks. Include routine tasks.
Not Important	<b>Group 3</b> Urgent, not important  These tasks are urgent for someone else but not important for your business. Tactfully reject them if you can.	<b>Group 4</b> Not urgent & not important  These are time stealers! Do them when you have nothing else to do.

Time Management Matrix: Adapted from "the 7 Habits of Highly Effective People" by Stephen R. Covey

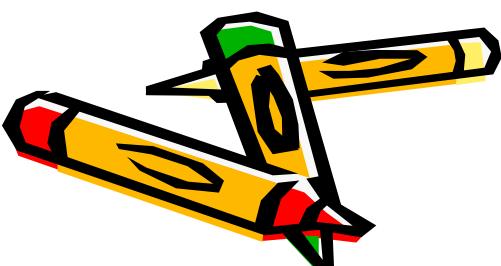
# Structuring Your Time

- Identify the **tasks** that have to be done
- **Rank** these tasks
- **Sequence** the work, giving a realistic allocation of time to each activity
- Remember to allow time for **social and personal commitments**
- Become **aware** of time-wasting activities and avoid them or keep them under control
- Be **realistic** about how much you can achieve in each study session and remember to schedule short breaks every hour or so.



# Planning for the Semester

- Check the SLIIT Calendar
- Draw up a semester timetable
- mark on your timetable dates when **lectures** and **tutorial** are held, **tests** are set, **assignments** are due, and any other significant events.
- Devise a **colour-coding** system to avoid confusion
- Overview of your commitments for the semester
- Consider the study preparation time required for lectures, tutorials, tests, assignments and so on and indicate these on your timetable.



# Year Plan

2011 Year Planner

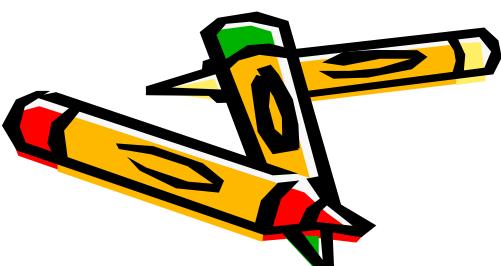
2011	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T						
January						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
February		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28							
March		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
April				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
May					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
June		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
July				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
August	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
September				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
October					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	31		
November		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
December				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

[Lectures] [Light Week] [Midterm Ex.] [Regular Ex.] [Repeat Ex.]

[Marks] [BoE] [Repeat Reg.]

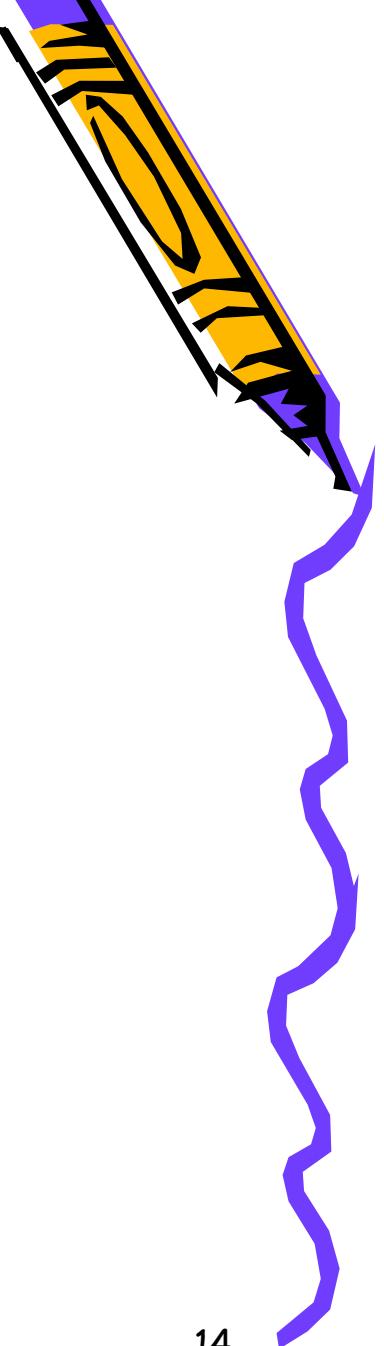
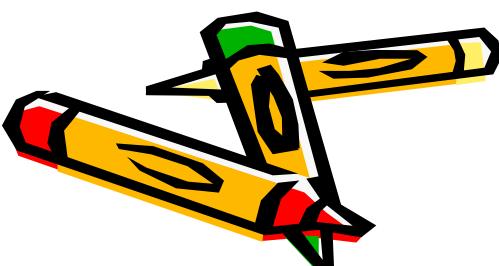
# Planning for the Week

- At the **beginning** of each week refer to your semester timetable and use this as the basis of your weekly plan
- Make additional learning hours for **easy** class 2 hours, **average** class 3 hours, **difficult** class 4 hours
- Example: Weekly [Planner](#)



# Weekly Plan

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8:00am							
9:00am			Lecture				
10:00am	Lecture		Lecture	Lecture		Sport	
11:00am	Lecture	Lecture				Sport	
12:00am			Library		Lecture	Sport	
1:00pm		Library	Study			Sport	Study
2:00pm	Lecture	Study	Study	Lecture		Sport	Study
3:00pm	Lecture	Study		Lecture		Sport	Study
4:00pm					Lecture	Sport	Study
5:00pm			Lecture				
6:00pm			Training				
7:00pm	Study	Study	Training	Study	Study		
8:00pm	Study	Study		Study	Study		



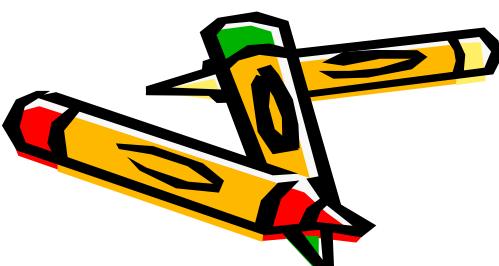
# Planning for the Day

- Make a **to-do list** for each day the night before or during breakfast
- Include **everything** that needs to be done on the list, including homework, class assignments, shopping, laundry and even partying
- **Prioritize** items
- When you have completed one of the tasks on your list, **cross it off**



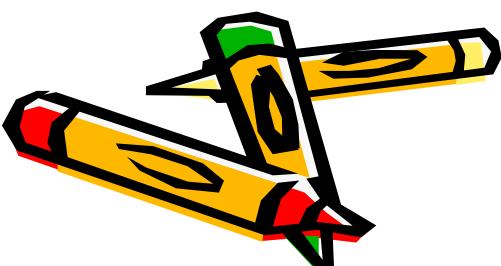
# Five Steps to Successful Time Management

- Set specific academic and personal **goals**
- Create a **term calendar**, recording major events
- Create a **weekly schedule** of your classes, labs, drill, meetings, etc
- Decide on specific times to work on each course
- Make a to-do list for each day the night before or during breakfast



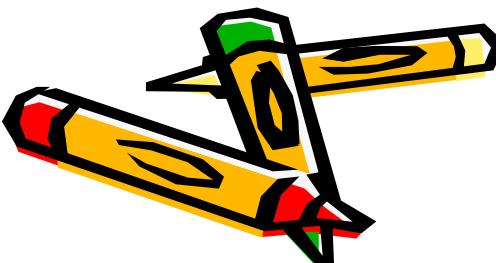
# Stress Reduction Tips

- Find someone with whom you can talk
- Gain temporary control of your anxiety by practicing relaxation techniques
- Work on feeling better about yourself
- Try replacing negative thinking with positive thoughts
- In general, try being your own best friend



# Exercise: Time Management

- Complete Task 1. Suggest methods that you can use this time period (Covid-19 Break) to maximize your learning time
- Write a reflective journal about an incident in your academic life (a disaster or a difficulty) you faced due to poor time management
- Submit your assignment as a PDF on or before midnight 20<sup>th</sup> April, 2021.

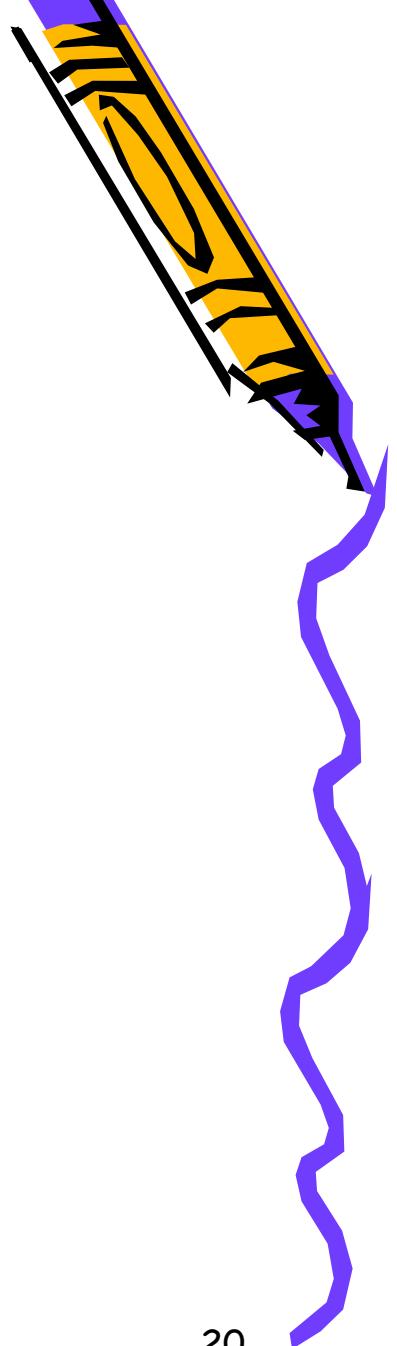
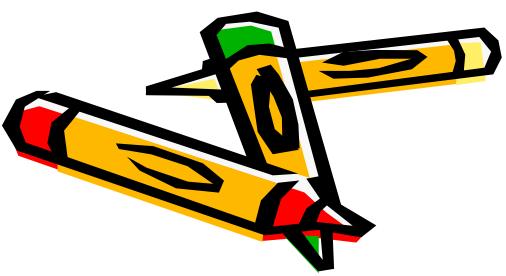


The bad news is time flies,  
The good news is you are the  
pilot -Michael Althsuler

Thank You



Thank You





# COMPUTING LANDSCAPE

Prof. Koliya Pulasinghe

# Aim of the Lecture

- You will be a professional who works in an area related to Computing
- Be effective by knowing the Landscape of your domain
- How and in Which ways your profession impacts the society

# Agenda

- History of Computers
- Today's Computing Landscape
- Social, Legal, Ethical and Environmental Aspects
- Discussion

# History of Computers

- Pre-Generation (Before '40s) – Mechanical
- First Generation ('40s) – Vacuum Tube
- Second Generation ('50s) – Transistor
- Third Generation ('60s) – Integrated Circuits
- Fourth Generation ('70s) – Micro-processors
- Fifth Generation ('00) – AI

# History of Computers

- Rapid advancement
  - Components
    - CPUs
    - Hard Disk
    - Memory
    - IO Devices

# History of Computers

- Rapid advancement
  - Computers
    - PCs, Workstations, Play stations
    - Notebooks
    - Hand held devices
    - Servers, Server farms and super computers
    - Embedded systems, wearable devices

# Today's Computing Landscape

- Connectivity and Digital World
  - Internet
  - Mobile Phones
  - Emails
  - Social Networks
  - Online Education

# Today's Computing Landscape

- Video sharing
- Collaboration
- E-commerce
- Free information, Games etc.
- Blogs
- WWW

# Areas of Concern in Current Computing Landscape

- Ethical Issues
- Legal Issues
- Social Issues
- Environmental Issues

# Ethical Issues

- Intellectual Property
- Information Collection
- Spam
- Differences between personal choices, business policies and Law

# Legal Issues

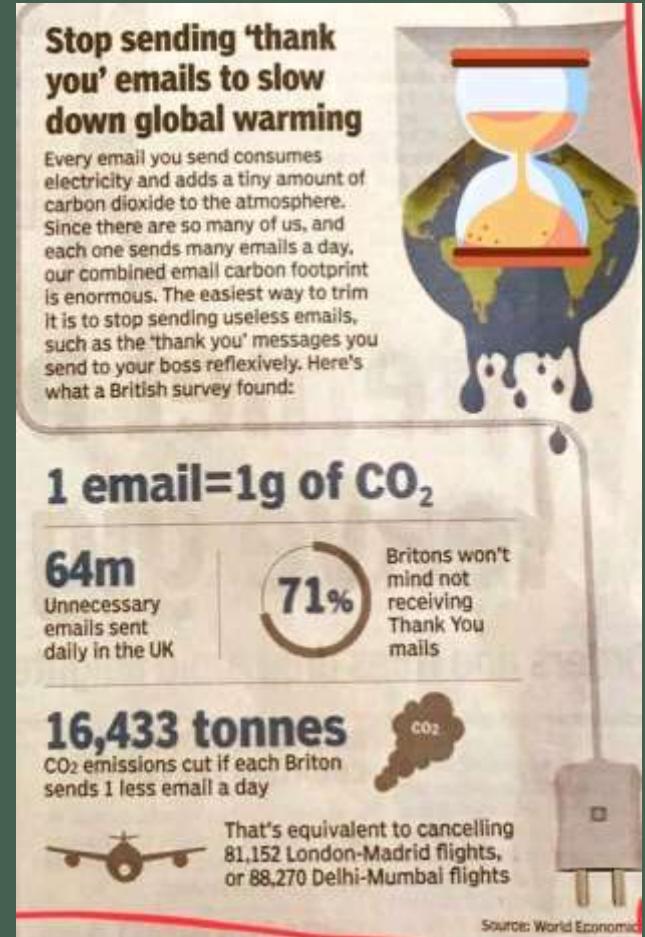
- Intellectual property and Licensing
- Security vs privacy
- Cyber crimes

# Social Issues

- Outsourcing and unemployment
- Digital divide and Massive Open Online Courseware (MOOC)
- Computerized customer service
- Increased possibility of identity theft
- Social media related issues: Cyberbullying

# Environment Issues

- E waste
- Energy for manufacturing/operating
- Hard copies of documents



# Task 1: Critically evaluate following questions.

- Some say that no technology is inherently good or evil; rather, any technology can be used for either good or evil purposes. Do you share this view?
- “Thanks to a communications and software revolution, we are more ‘connected’ than ever before — by cell phone, email, and video conferencing — yet more disconnected than in the past from social interaction”. Do you agree?
- What do you think are the main driving forces behind technology advances? Are you happy with the fast pace of the changes, or do you wish it were slower?
- Do you tend to acquire new technological devices before or after the majority of your friends? What are the pros and cons of being an early/late adopter of a new technology?

# Assignment – Computing Landscape

- Take one of your lifetime experience that resonates most with one of the four questions in the previous slide.
- Write a reflective journal about that experience.
- Submit your assignment as a PDF on or before midnight 27<sup>th</sup> September, 2020.

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# Professional Responsibilities and Codes of Ethics

Lecture 09

Prof. Koliya Pulasinghe

# Agenda

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- ▶ Profession, Professional, and Professionalism
- ▶ Attributes of a Profession
- ▶ Impact of your profession
- ▶ Ethics and Codes of Ethics
- ▶ Purpose of professional codes
- ▶ Activity

## Terms

---

- ▶ **Profession:** A calling requiring specialized knowledge and often long and intensive academic preparation
- ▶ **Professional:** A person who engaged in one of the learned professions conforming to the technical or ethical standards of a profession
- ▶ **Professionalism:** The conduct, aims, or qualities that characterize or mark a profession or a professional person

# Who is a Professional ?

- ▶ Who posses certain attributes such as
  - ▶ Expert Knowledge
  - ▶ Autonomy with respect to “ independence in conducting one's professional practice”
- ▶ Have special responsibilities or moral obligations that exceed those of ordinary individuals.





Without professionalism I'd be an amateur, and the clients I want don't hire amateurs.

— *David Airey* —

AZ QUOTES

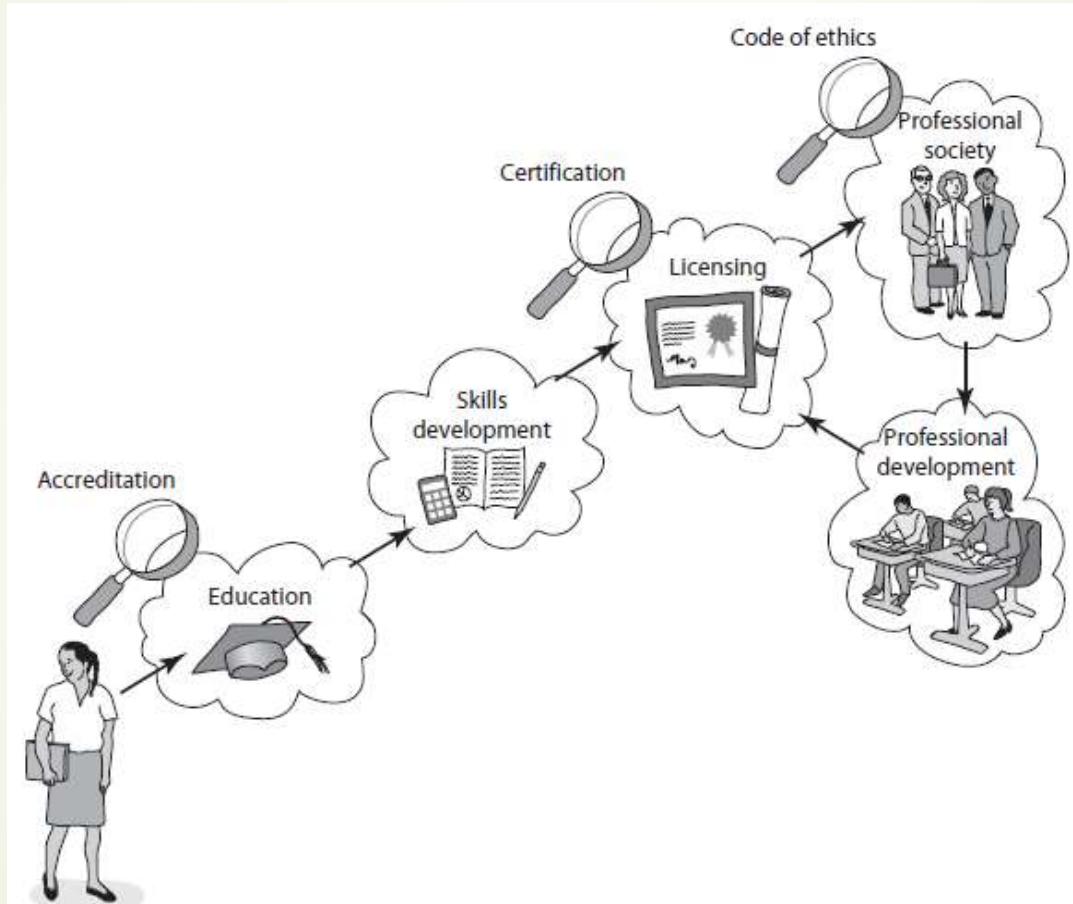


Professional is not a label you give yourself - it's a description you hope others will apply to you.

— *David Maister* —

AZ QUOTES

# Attributes of a Profession



- A professional association or professional body (IET, CSSL, SLMC) seeks to further a particular profession, the interests of individuals engaged in that profession and the public interest

# Who is a Computing Professional ?

- ▶ Anyone who is employed in computer, information technology or information/communication fields.
- ▶ Can include
  - ▶ Software / Hardware designers
  - ▶ software engineers,
  - ▶ software quality/ system analysts,
  - ▶ Database administrators
  - ▶ software technical writers,
  - ▶ software managers,
  - ▶ Computer scientists

# Impact of your job/work

---

- ▶ Computer systems that can have direct life-threatening impact.
  - ▶ Air craft and air traffic control systems
  - ▶ Mass transportation systems
  - ▶ Nuclear reactors, missile systems
  - ▶ Medical treatment systems
  - ▶ Design of bridges and buildings
  - ▶ Development of analytical models for medical treatment

# Responsibilities of Computing Professionals

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- ▶ To Clients and Users
- ▶ To Employers
- ▶ To Other Professionals
- ▶ To the Public

# Ethics

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- ▶ Ethics is a set of beliefs about right or wrong behavior
- ▶ Ethical behavior conforms to generally accepted social norms - > Universally accepted
- ▶ Eg : Lying and cheating are unethical

# Why Ethics ?

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- ▶ Helps people to make moral decisions
- ▶ Assumes that people are rational and free to choose how they will act
- ▶ Describes how people do act and how people should act.

# CODE of ETHICS

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- ▶ Professional Ethics cover the personal, organizational and corporate standards that are expected of professionals.
- ▶ Includes issues involving relationships or responsibilities with:
  - ▶ Employees, employers, and other people who use the products or services.
  - ▶ “Computer Ethics” includes social, political, and personal issues.

# Professional codes of Ethics for IT

- ▶ Computer Society of Sri Lanka ( CSSL )
- ▶ The Institute of Engineering and Technology ( IET )
- ▶ The Association for Computer Machinery ( ACM )
- ▶ The Institute for Electrical and Electronic Engineers- Computer Society ( IEEE- CS )
- ▶ British Computer Society ( BCS )



# CSSL Codes of Ethics

## **1. Professionalism**

That you will work to improve the value and virtue of the society and respect all its members while protecting the safety, welfare and health of the community.

## **2. Professional Development**

You will always work in your professional interests to develop your career while also enhancing the professional development of your colleagues and fellow staff.

## **3. Added Value to Sri Lanka**

You will work diligently to strive to enhance the value of Sri Lanka and its citizens in any possible way and place the interests of your country above those of personal sectional interests.

## **4. Honesty**

Maintain honesty in all dealings and in your representation of knowledge, skill and services. In addition to that, you are required to strive in order to protect the public from misinformation and misinterpretation.

## **5. Competence**

You will pay meticulous and diligent attention to work competently for your stakeholders and perform services only in areas of competence.

# IEEE Codes of Ethics

- ▶ Accept responsibility in making engineering decision consist with the safety, and welfare
- ▶ Avoid real conflicts of interest wherever possible
- ▶ Be honest
- ▶ Reject bribery in all forms



# ACM Code

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- ▶ Contribute to society and human well being
- ▶ Avoid harm to others
- ▶ Be honest and trustworthy
- ▶ Be fair and take action not to discriminate
- ▶ Honour property copy and patents
- ▶ Give proper credits to IP
- ▶ Respect the privacy of others
- ▶ Honour confidentiality

## ACM – SE-CODE

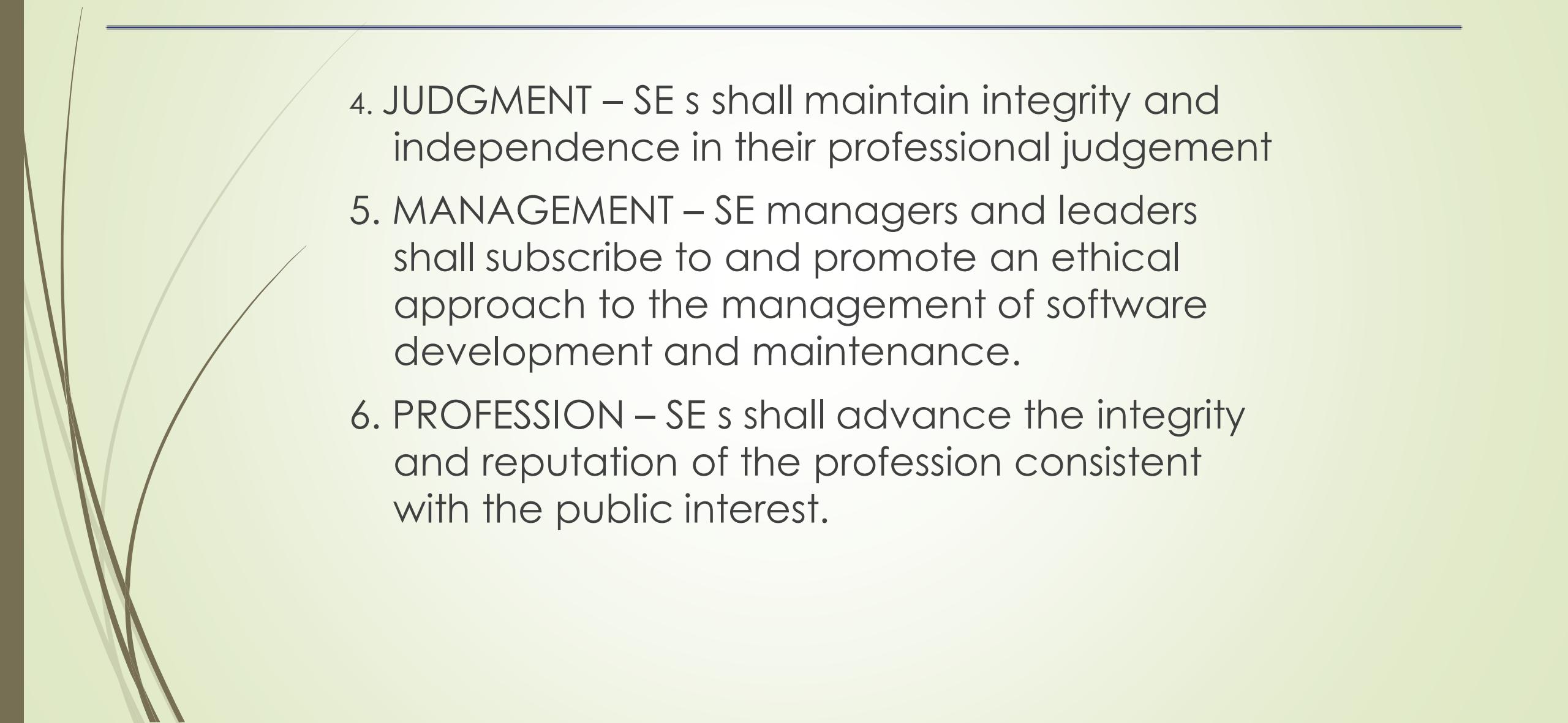
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► Software Engineering code of ethics ( by ACM )

1. PUBLIC – SE s shall act consistently with public interest
2. CLIENT AND EMPLOYER – SE s shall act in a manner that is the best interests of their client and employer consistent with the public interest.
3. PRODUCT – SE s shall ensure that their products and related modifications meet the highest professional standards possible

# ACM – SE-CODE

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- 
4. JUDGMENT – SE s shall maintain integrity and independence in their professional judgement
  5. MANAGEMENT – SE managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.
  6. PROFESSION – SE s shall advance the integrity and reputation of the profession consistent with the public interest.

## ACM – SE-CODE

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- ▶ 7. COLLEAGUES – SEs shall be fair to and supportive of their colleagues
- ▶ 8. SELF – SEs shall participate in life-long learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.

# Purpose of Professional Codes

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- ▶ Professional codes of ethics are often designed to motivate members of an association to behave in certain ways.
- ▶ Five primary functions of codes are to:
  - ▶ *Inspire*
  - ▶ *Educate*
  - ▶ *Guide*
  - ▶ *Responsibilities*
  - ▶ *Discipline the members*

# IT professionals need to commit to....

- ▶ Integrity
- ▶ Competence
- ▶ Professional Responsibility
- ▶ Work Responsibility
- ▶ Societal Responsibility

**DO WHAT  
IS RIGHT,  
NOT WHAT  
IS EASY**

# Example

---

- ▶ You are a programmer at a bank and you found flaws in your program which is used in ATMs.
- ▶ Would you tell your employer ?
- ▶ Solution : You have to be honest. Inform your employers and try to fix the program. The consequences for hiding faulty programs would be worst than admitting your mistakes.

# Setting your own professional Ethics

- We need professional ethics because of the impact that our actions have on society as a whole
- Review and refresh your knowledge in professional ethics constantly
- Reflect on the ethics of how we behave as we carry out our duties should be one of our professional obligations



## Task 1:

---

- ▶ Scenario : A team of programmers are working on a computer-controlled device for treating cancerous tumors. The project is behind schedule caused by various delays and the deadline is approaching. There would be no time for testing the device. The system has been functioning well in the routine treatment tested so far.
- ▶ As the project manager, you have to consider delivering the system on time without proper testing or continue testing to make patches if the team finds any bugs.

## Task 1:

---

1. Do a stakeholder analysis by identifying the possible stakeholders of the project and their positive and negative impacts of the system delivered.
2. Identify the IET Rules of Conduct that will directly applicable for the decision.
3. As the project manager, what are some solutions or decision you could make ?

**Task 1: Answer All 3 Questions.**

# Reflective Journal

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- You have to obtain a cumulative GPA of 2.5 or more at the completion of your degree programme to obtain IET membership
- Task 2: Consider above fact and **write how you plan to achieve above GPA.**
- Write a Reflective Journal on An Incident in your life where you realized the importance of Ethics or Morality.
- Submit your assignment as a **PDF on or before midnight 04<sup>th</sup> May, 2021.**



# Intellectual Property

PROF. KOLIYA PULASINGHE

"All I asked was, 'Can I patent  
my copyrighted trademark?!!'"



# What is Intellectual Property

*creations of the human mind:  
inventions; literary and artistic works; and  
symbols, names and images used in commerce.*

- Intangible asset with exclusive ownership for a limited period of time
  - IP assets - Owned / transfer / sold / Licensed



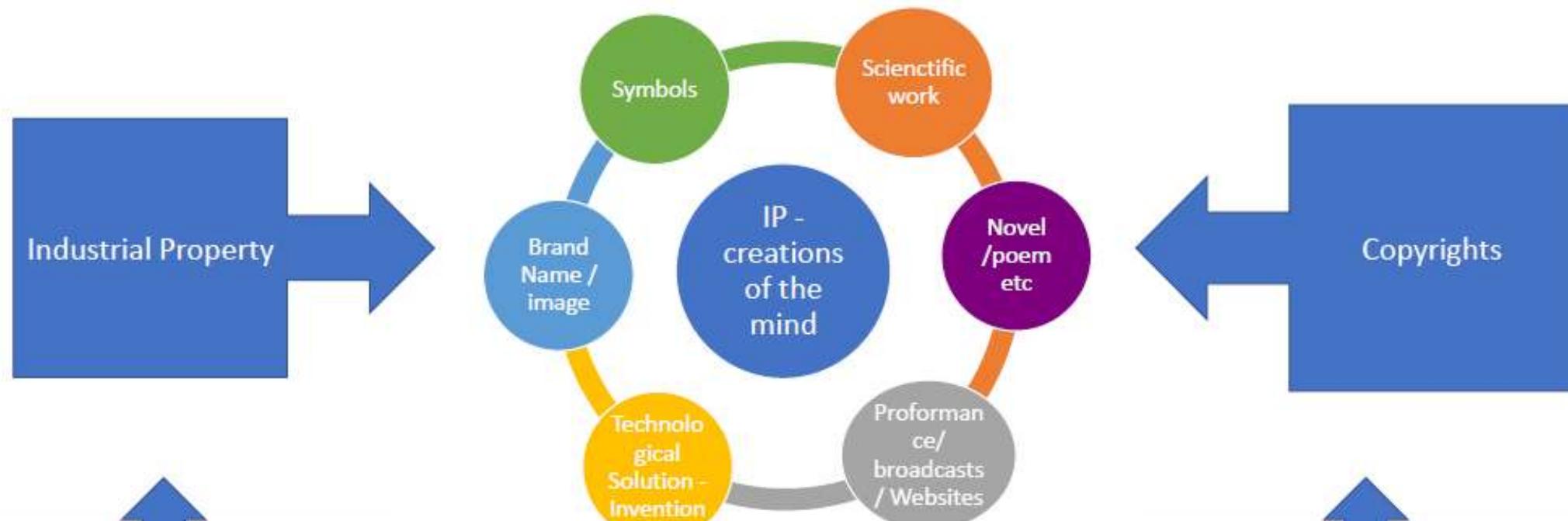
# What is Intellectual Property

WIPO", does not have a more formal definition.

*"Literary artistic and scientific works; performances of performing artists, phonograms, and broadcasts; inventions in all fields of human endeavor; scientific discoveries; industrial designs; trademarks, service marks, and commercial names and designations; protection against unfair competition; and "all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields."*

*Convention Establishing the World Intellectual Property Organization, Signed at Stockholm on July 14, 1967; Article 2, § viii*

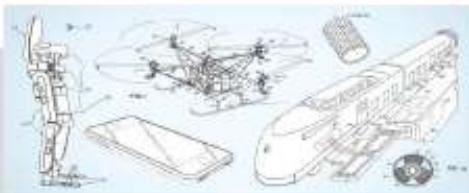
# Intellectual Property System



## Type of IP Protection

### Patents

Inventions e.g. a new form of jet engine



### Trademarks

Identify source of a product or a service  
e.g. logos



### Geographical Indications (GI)

product with unique geographical origin,  
such as Champagne



### Industrial Design

Ornamental or Aesthetic aspect of an article  
Eg: 3D shapes /2D patterns



### Copyright

Expression of an Idea. Literary, artistic and scientific works  
e.g. books  
Related rights - Performances, broadcasts e.g. concerts



### Trade Secrets

Secret Information with commercial value



# Why Intellectual Property System?

- ❑ Enables people to earn
  - ✓ recognition
  - ✓ financial benefit from what they invent or create
- ❑ Aims to foster a balanced environment in which creativity and innovation can flourish



**TISC@COSTI**

<https://costi.gov.lk/index.php/en/coordinating/tisc-costi>



PARLIAMENT OF THE DEMOCRATIC  
SOCIALIST REPUBLIC OF  
SRI LANKA

**INTELLECTUAL PROPERTY  
ACT, No. 36 OF 2003**

[Certified on 12th November, 2003]

*Printed on the Order of Government*

Published as a Supplement to Part II of the Gazette of the Democratic  
Socialist Republic of Sri Lanka of November 14, 2003

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TO BE PURCHASED AT THE GOVERNMENT PUBLICATIONS BUREAU, GALLE面

# Domestic IP System

- The first patent was granted on November 22, 1860 in Sri Lanka under the British Inventor's Ordinance of 1859.
- **The present Intellectual Property system operates according to the Act. No 36 of 2003 (came into effect on November 12. 2003)**
- Act. No36 of 2003 covers –
  - *Copyrights, related rights, expression of folk roles,*
  - *Patents,*
  - *Industrial designs,*
  - *Trademark,*
  - *Unfair competition,*
  - *Geographical Information,*
  - *Undisclosed information and*
  - *Layout designs and integrated circuits*

## *Act No.36 Aims to....*

- Promote the national creativity
- Protect the national creative efforts
- Facilitate and rationalize the trade
- Enhancement of investment
- Protect the consumer interests
- Integrate the National economy into the knowledge driven global scenario

# International Treaties

- Sri Lanka is a party to

**The Paris Convention for the Protection of Industrial Property (since 1952)**

The Madrid Agreement for the Repression of False or Deceptive  
Indication of Source on goods (since 1952)

The Nairobi Treaty for the Protection of Olympic Symbol (since 1984)

**The Patent Co-operation Treaty (since 1982)**

The Berne Convention (since 1959)

The Universal Copyright Convention (since 1983)

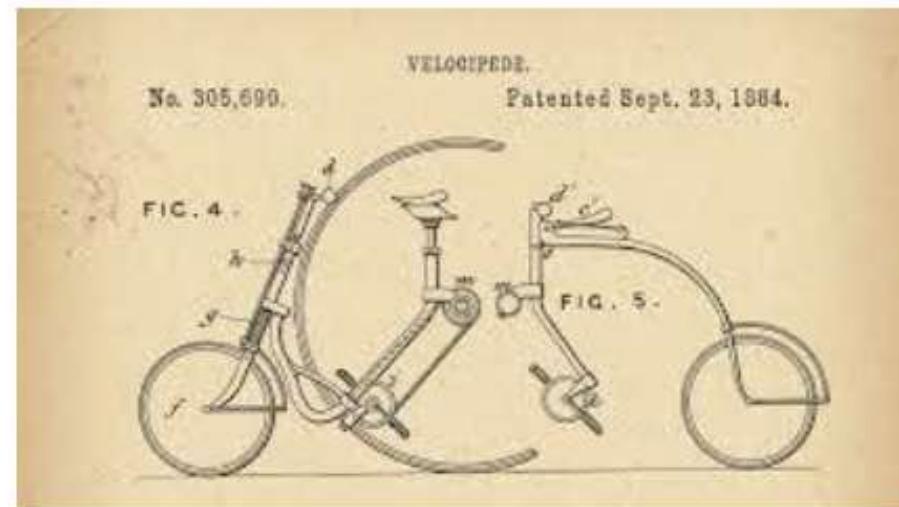
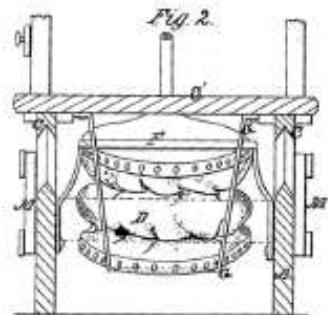
The Convention establishing the World Intellectual Property Organization (since 1978)

**The TRIPS Agreement (since 1995),**

The Trademarks Law Treaty (since 1996)

## Basics of Patents

CHARLES SINGER  
IMPROVED ROCKING-CHAIR  
Patented July 6, 1869  
No. 92,379



# What is a Patent?

*A legal certificate that gives you the right to*



## Protect Your Invention



## For 20 Years



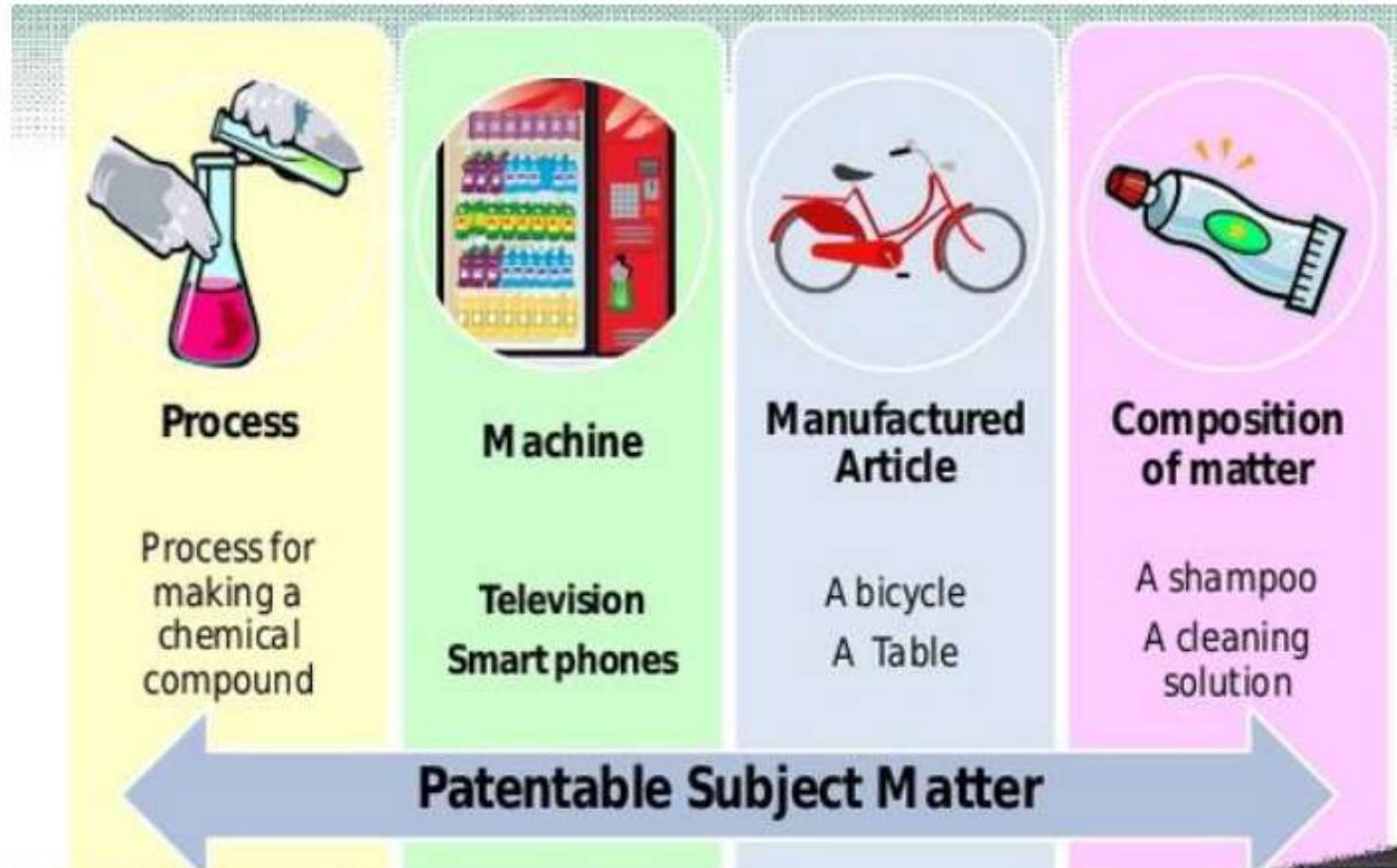
## In Specific Territories

State or by a regional office  
acting for several States

Exclusive right - prevent or  
stop others from  
commercially exploiting

From the filing date of the  
application.

# What Can Be Patented - Article 27, TRIPS



# Patentability Criteria Article 27, TRIPS

- Three principal requirements

New characteristic which was **not** known to the public before the date of filing of the patent application or the priority date claimed.

Novelty

Utility

Non-  
obviousness

Invention needs to be able to be used or made in any kind of industry

Invention should not be obvious to a person skilled in the Art

Person skilled in the art = Technician having all knowledge of the technical field of the invention



# How to Apply for a Patent

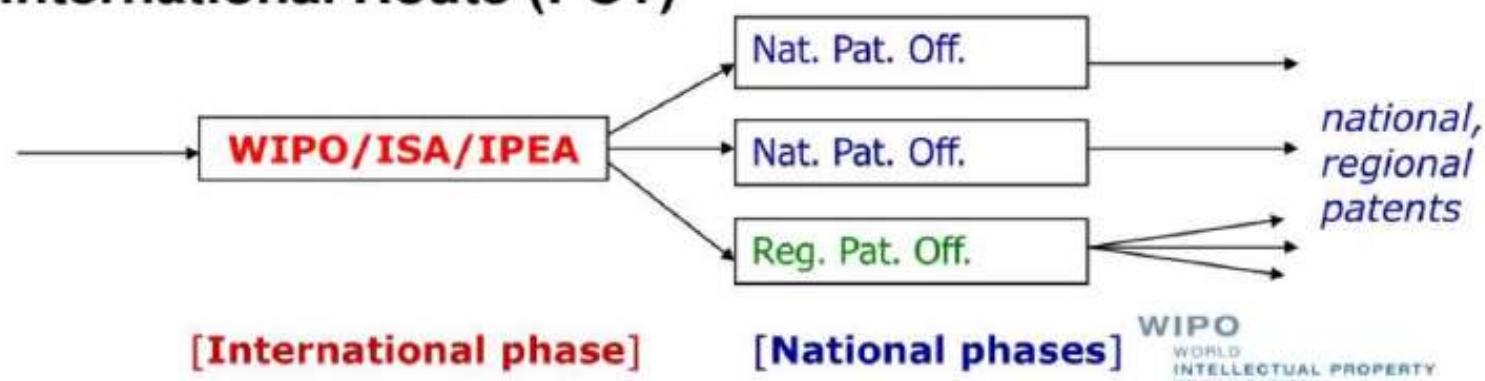
## 1. National Routes



## 2. Regional Route



## 3. International Route (PCT)





## Why file a patent application?

- **Exclusive** control in the market for your product
  - Protection from copying
  - Prevent competitors from developing knockoffs
  - Securing market access
- **Licensing or transfer/sale** of the patent right
  - Joint development with other organizations (ex. PPP)
  - Enhancing negotiation position (ex. cross-licensing)
- Attracting **investors and funding**
- Seeking **prestige/reputation/image**
- **Motivation** of academic researchers for recognition



# What can be patented?

## Invention

- It's a new concept conceived by an inventor
- Not all concepts are patentable

Invention should comply ;  

- **Novelty** (not anticipated)
- **Inventive step** (unobvious)
- **Industrial applicability** (utility)  
to be a patented product



### Patentable subject matter:

- Product
- Process

### Non-patentable subject matters:

- Mathematical formulae
- Naturally occurring organisms
- Laws of nature
- Abstract ideas
- Natural phenomenon



## Who has rights to a patent?

- **Inventor(s)** : holds the right to a patent
- **Employee** : based on the employment agreement
- **Contractor** : based on the contract agreement

Employee can be from private or government entity

University : Academic staff, undergraduate or post graduate students, technical staff



**Intellectual property  
policy**

## When to file the patent application?

- Follow **first to file principle** because any third party might file a patent for the same invention which is publicly disclose
- If publicly disclose it becomes **prior art**

Publicly disclose;  
Exhibition  
Research paper  
Open forum

safeguard

Grace period



Sri Lanka has 12 month grace period



**Where**

## to file the patent application?

- Filing a national application with a National office (NIPO)
- Filing a regional application with a Regional office
- Filing an international application using the PCT (Patent Cooperation Treaty)

### Local filling;

- Lower cost
- Can use local language
- Can obtain priority date fast

### Foreign filling ;

- Which countries have the market
- Customers / Users
- Competitors
- Licensees
- Counterfeits (origin/copied)
- Legal requirements
- Enforceability



## Patent applications for the top 20 offices, 2018<sup>[3]</sup>

Rank	Country	Patent applications
1	China	1,542,002
2	U.S.	597,141
3	Japan	313,567
4	South Korea	209,992
5	European Patent Office	174,397
6	Germany	67,898
7	India	50,055
8	Russian Federation	37,957
9	Canada	36,161
10	Australia	29,957

Patent grants for the top 10 offices, 2018<sup>[5]</sup>

Rank	Country	Patent grants
1	China	432,147
2	U.S.	307,759
3	Japan	194,525
4	European Patent Office	127,603
5	South Korea	119,012
6	Russian Federation	35,774
7	Canada	23,499
8	Australia	17,065
9	Germany	16,367
10	India	13,908

## Patent applications per million population for the top 10 2018

Rank	Country	Patent applications per million population
1	 South Korea	3,148
2	 Japan	2,005
3	 Switzerland	1,081
4	 China	1,001
5	 Germany	884
6	 U.S.	871
7	 Denmark	629
8	 Sweden	578
9	 Finland	564
10	 Netherlands	537

Top patent applicants worldwide, 2013–2015<sup>[7]</sup>

Rank	Applicant	Country	Patent families
1	Canon	Japan	24,006
2	Samsung Electronics	South Korea	21,836
3	State Grid Corporation of China	China	21,635
4	Mitsubishi Electric	Japan	15,277
5	IBM	United States	14,972
6	Toyota	Japan	14,840
7	Huawei	China	14,605
7	Toshiba	Japan	14,567
9	LG Electronics	South Korea	14,561
10	Robert Bosch GmbH	Germany	12,598

# Licensing of an IP

- ▶ Licence is a permission that an IP owner grant to another person to use the IP on agreed terms and conditions, while he continues to retain ownership of the IP
- ▶ Licensing creates an income source
- ▶ It establishes a legal framework for transfer of technology to a wider group of researchers and engineers
- ▶ Creates market presence for the technology or trademark

# Software Piracy

- ▶ Software piracy is the unauthorized and illegal duplication of copyrighted software.
- ▶ Covers in Sri Lanka Intellectual Property Act, No. 36 of 2003
- ▶ In general, you do not have the right to copy, loan, rent, or in any way distribute the software, unless otherwise specified in the license.
- ▶ The commercial value of pirated software is \$19 billion in North America and Western Europe and has reached \$27.3 billion in the rest of the world.
- ▶ According to the [2018 Global Software Survey](#), 37% of software installed on personal computers is unlicensed software

# Software Piracy

- ▶ Five major types of software piracy could be classified:
  - ▶ Soft-lifting
  - ▶ Client-Server Overuse
  - ▶ Internet Piracy
  - ▶ Hard-Disk Loading
  - ▶ Software Counterfeiting

# Fair Use

- ▶ Copyright law protects certain exclusive rights of copyright holders.
- ▶ However, copyright law does allow limited copying, distribution, and display of copyrighted works without the author's permission, under certain conditions known as "fair use".

# Fair Use

- ▶ Here are the four standards:
  - ▶ The purpose and character of the use.
  - ▶ The nature of the copyrighted work.
  - ▶ The amount and substantiality of the portion used in relation to the copyrighted work as a whole
  - ▶ The effect of use on the potential market for or value of the work.

# Open- Source Software

- ▶ Source code to software ought to be freely distributed
- ▶ Encourage to examine and improve other's code
- ▶ New version of software appear much more frequently
- ▶ Eliminate tension between obeying copyright law and helping others
- ▶ Anyone can make money by providing support, those who provide best support would be rewarded
- ▶ Ex: Apache web servers, Linux OS

# Protect your Intellectual Property

## **Register the Appropriate IP Protection**

The strongest protection comes from registering your work. By doing so, you put your claim into the public view, discouraging many (but not all) people from using your work without permission.

### **Trademark registration**

- ▶ Fill a trademark application on its main brand and apply for registration

# Protect your Intellectual Property

## **A patent or provisional patent**

- ▶ Fill a provisional patent application and apply for the patent to protect your creation.

## **Registering your copyright**

## **Protect trade secrets**

- ▶ Establish policies and procedures to demonstrate ownership

# Assignment

- ▶ Collect the latest statistics related to Countries/Organizations and their patents as in slides 23 to 26. Write an essay on “Why rich countries are rich?” (Max. 300 words)
- ▶ Write an essay on “How Sri Lankan universities can make Sri Lanka a wealthy nation” (Max. 300 words)
- ▶ Write a reflective journal on a situation that you feel sad about being a Sri Lankan. Write what you, as a Sri Lankan can do to prevent that for future generations.
- ▶ Submit your assignment as a PDF on or before midnight 11<sup>th</sup> May, 2021.

# Do You Know These Personalities?



entrepreneurs



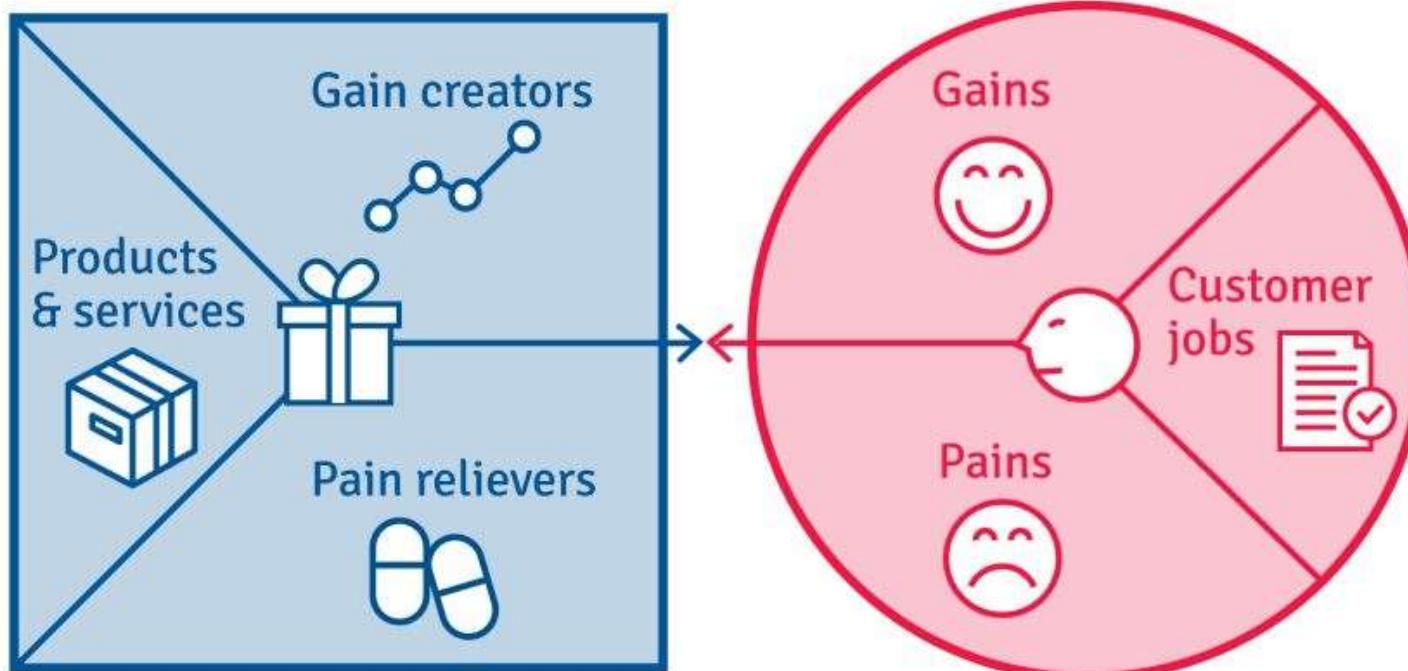
## Definition - Entrepreneurs

Entrepreneurs **are** people with the ability to create an entrepreneurship where none existed before. They produce combination of ideas, skills, money, equipment and markets that form a successful enterprise.

Entrepreneurship **is** the process of designing, launching and running a new business, which is often initially a small business. The people who create these businesses are called entrepreneurs.

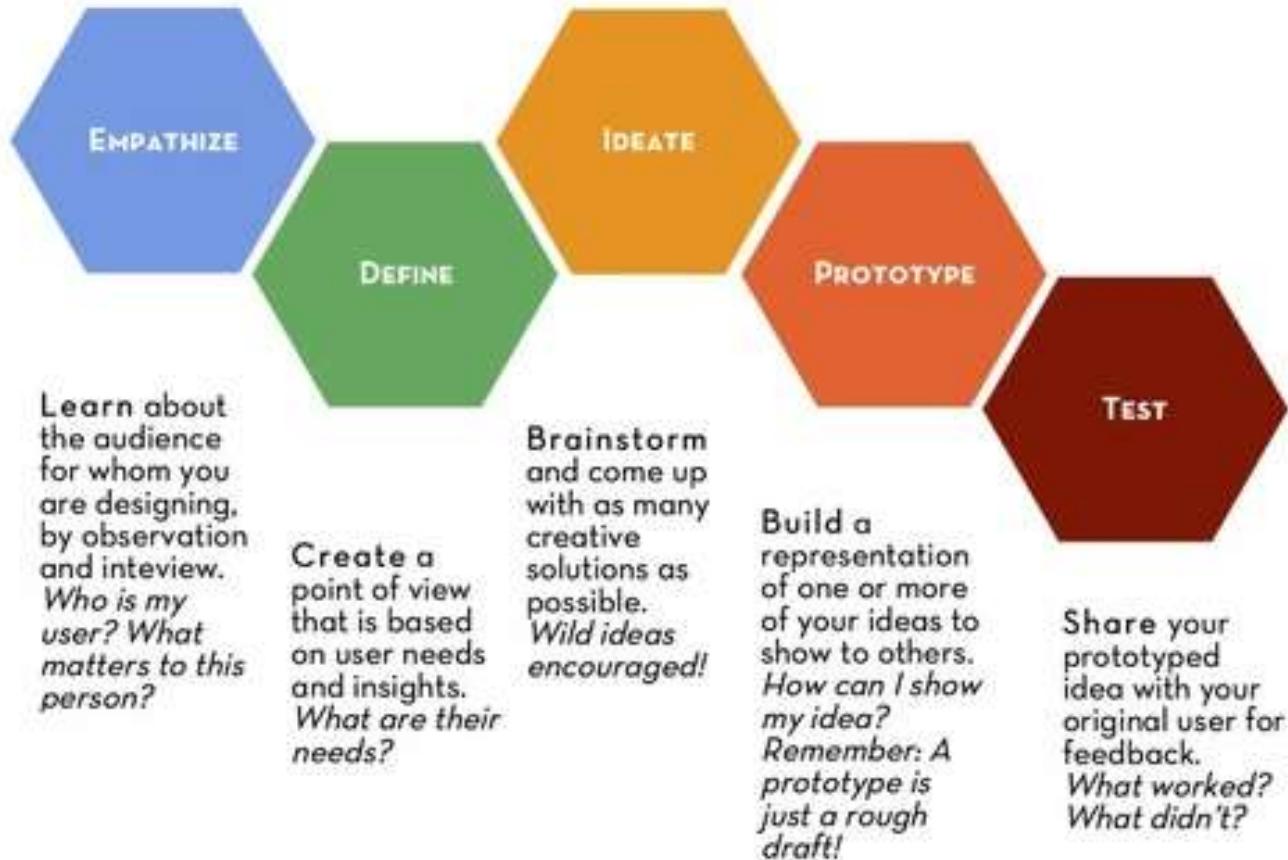
- <https://en.wikipedia.org/wiki/Entrepreneurship>

# Value Proposition



"A value proposition should clearly explain how a product fills a need, communicate the specifics of its added benefit, and state the reason why it's better than similar products on the market" - Investopedia

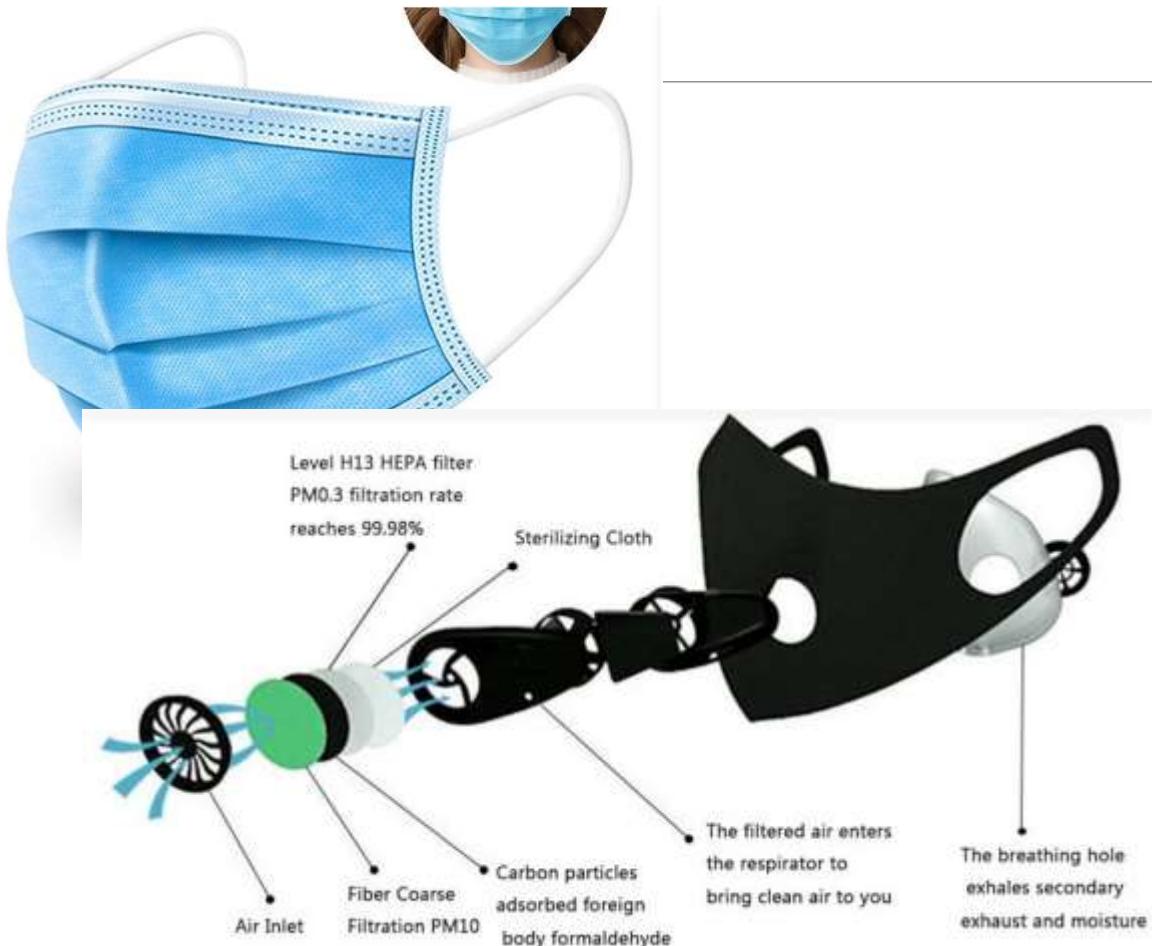
# We are all DESIGNERS!



# Design Thinking

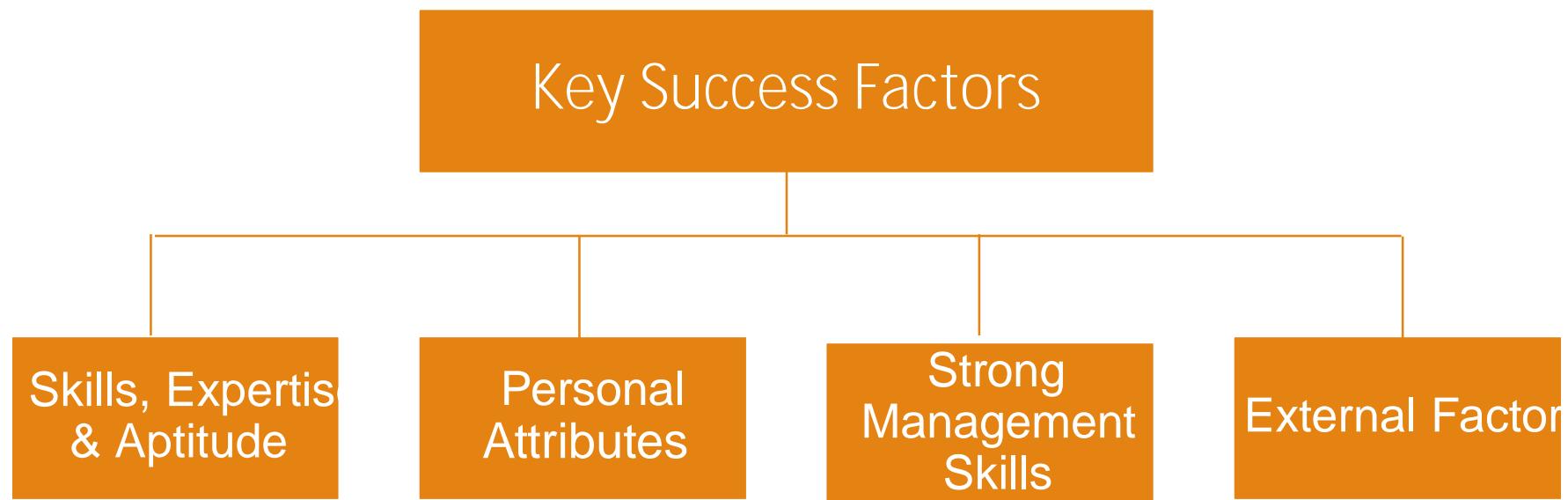
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# Value Proposition



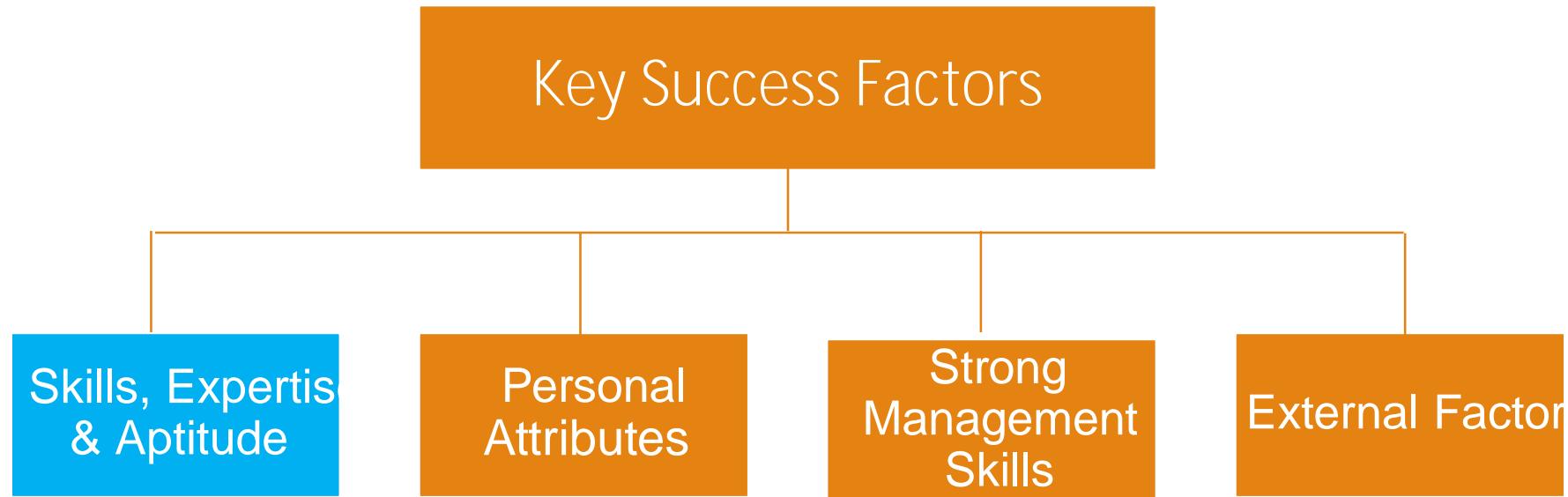
# Key Success Factors

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# Key Success Factors

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# Skills, Expertise, and Aptitude

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Strong particular skills, expertise and aptitudes that can be applied profitably in enterprise.

## Skills

- Usually refers to manual work, can be learned.
- Become an electrician, hairdresser

## Expertise

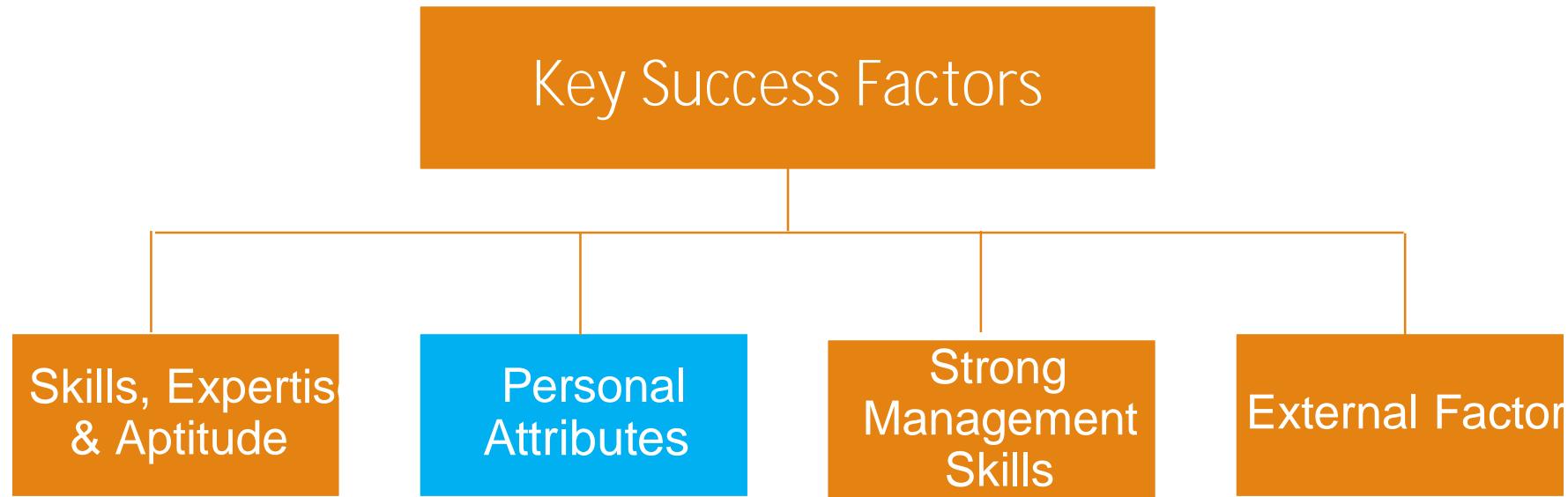
- Based on knowledge that you acquire
- Obtained from studying and/or experience

## Aptitude and talents

- What you are born with/talents

# Key Success Factors

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# Personal Attributes: Common Characteristics

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- Passion and Motivation
- Not Afraid to Take Risks Risk takers
- Selfbelief, Hard Work and Disciplined Dedication
- Adaptable and Flexible
- Product and Market Knowledge
- Strong Money Management
- Effective Planning (Not Over Planning) Skills
- The Right Connections
- Exit Preparedness
- Ability to Question Themselves
- Original thinkers
- Take responsibility for own actions
- Feel competent and capable
- Set high goals and enjoy working toward them

# Personal Attributes: Common Characteristics

---

## Successful

- Creative and Innovative
- Position themselves in shifting or new markets
- Create new products
- Create new processes
- Create new delivery

## Unsuccessful

- Poor Managers
- Low work ethic
- Inefficient
- Failure to plan and prepare
- Poor money managers

# Personal Attributes

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## Entrepreneurs are Made, Not Born!

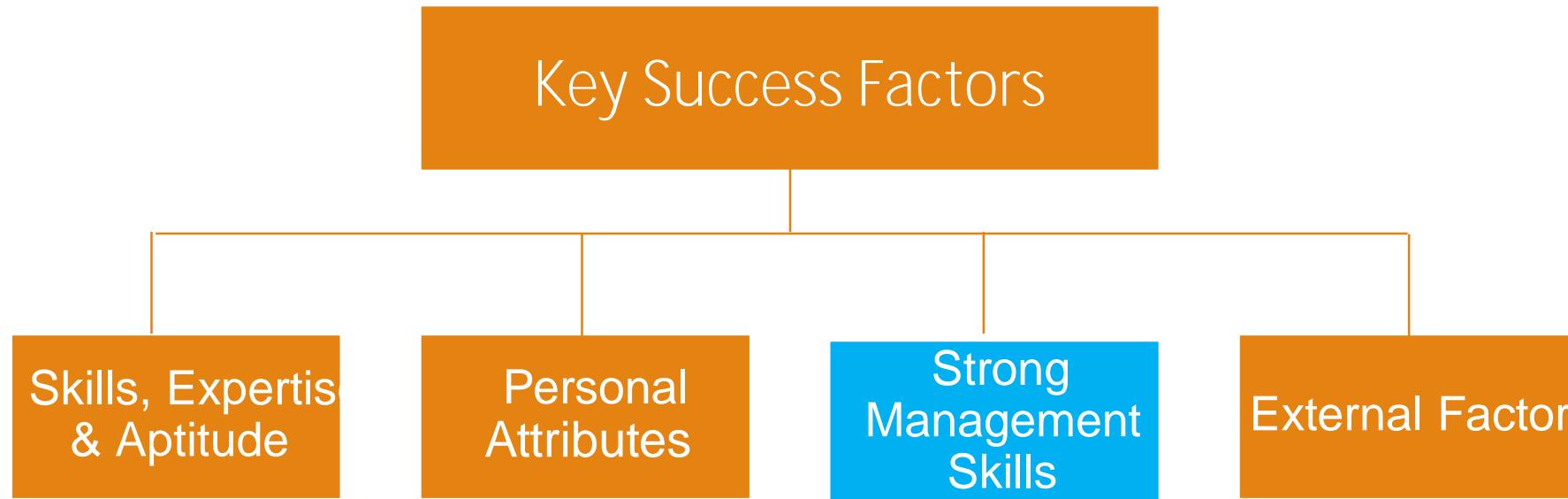
- Many of these key attributes are developed early in life, with the family environment playing an important role
  - Entrepreneurs tend to have had self employed parents who tend to support and encourage independence, achievement, and responsibility
  - Firstborns tend to have more entrepreneurial attributes because they receive more attention, have to forge their own way, thus creating higher selfconfidence

## Entrepreneurial Careers

- The idea that entrepreneurial success leads to more entrepreneurial activity may explain why many entrepreneurs start multiple companies over the course of their career
  - Corridor Principle- Using one business to start or acquire others and then repeating the process
  - Serial Entrepreneurs- A person who founds and operates multiple companies during one career

# Key Success Factors

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# Strong Management Skills

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Time Management

Employee Management

Customer Management

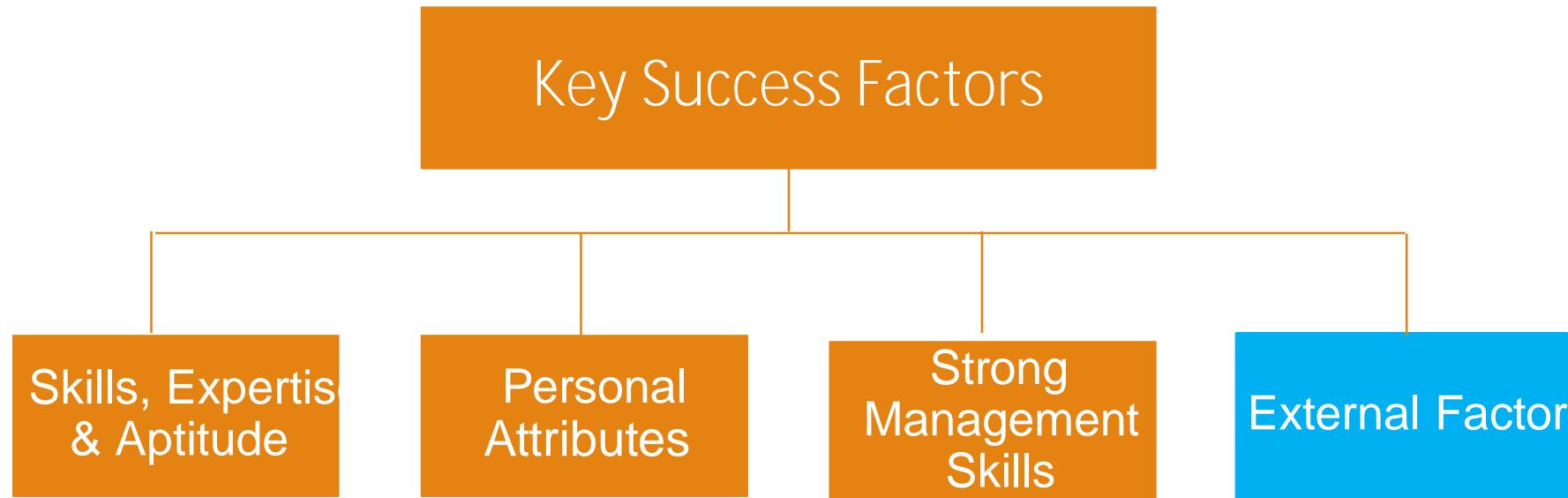
Sales Management

Financial Management

Business Management

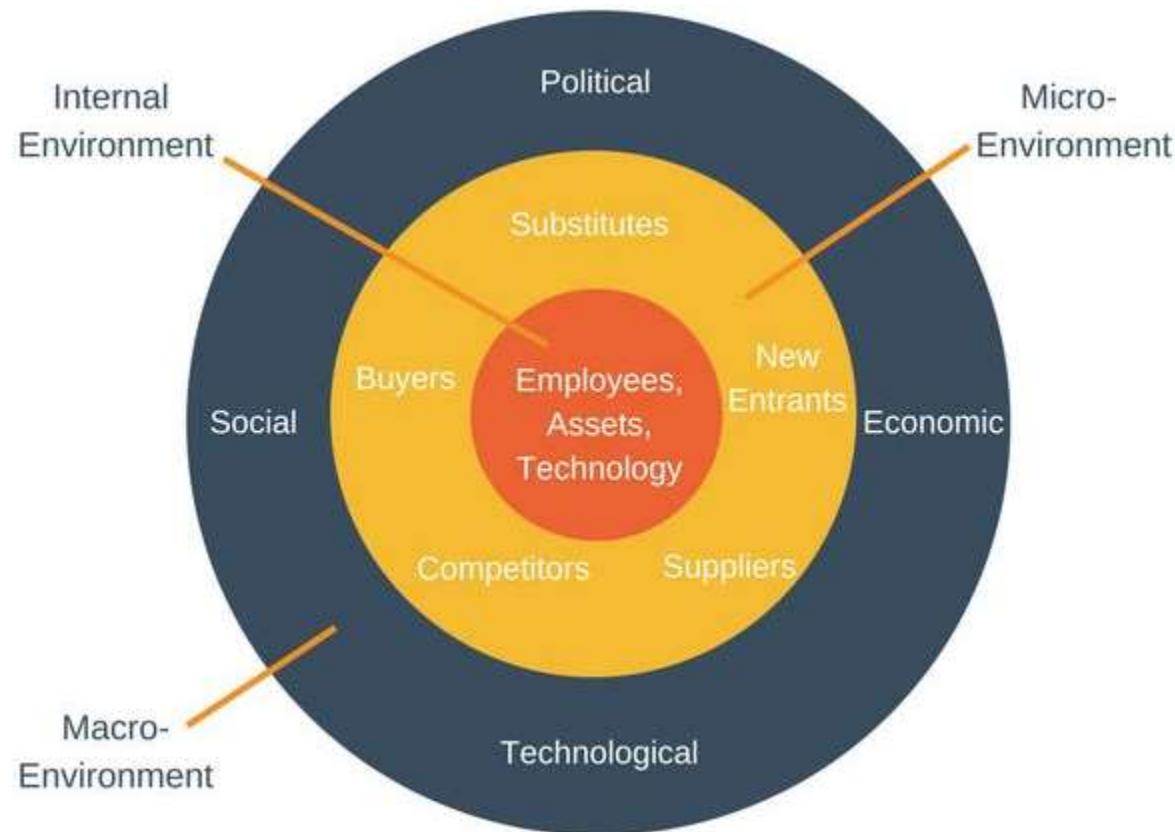
# Key Success Factors

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# Business Environment

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PEST Analysis followed by a SWOT Analysis helps an organization to develop business strategy

# External Factors

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## Political

- Government Policies
- Current Legislations
- Pressure groups
- Wars and conflicts

## Economic

- Home economic situation
- Home economic trends
- Interest/Exchange rates
- Taxation

## Social

- Lifestyle trends
- Demographics
- Consumer opinions
- Media views
- Role models

## Technological

- Competing technologies
- Research funding
- Innovation potential
- IP issues
- Consumer buying mechanisms

# HOW TO START A START-UP

by Anna Vital



**launch** - let everyone know you have made something

look for **funding** and build version one at the same time

register your C-corp, split **equity**

find a **co-founder**

**iterate on** the prototype until it makes sense



follow up with users. Are they coming back?

yes, they are coming back

**1,000**

get to 1,000 **users**

grow **5%** a week (hard, but proven possible)

2018

**keep growing** for another 4 years, and at that rate you will reach 25 million users



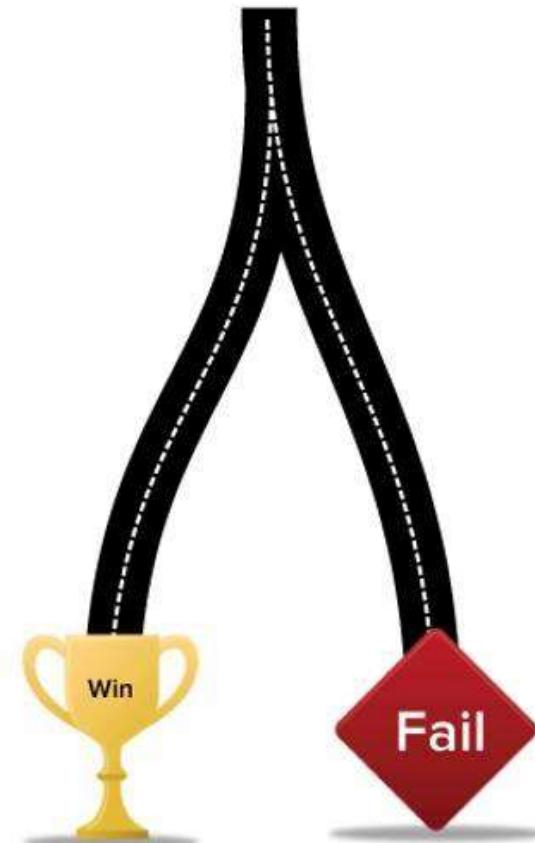
**SUCCESS**

no, they come and leave



**launch again** (after iterating)  
launch until users stay (AirBnB launched 3 times)

## What Most People Think



## What Successful People Know

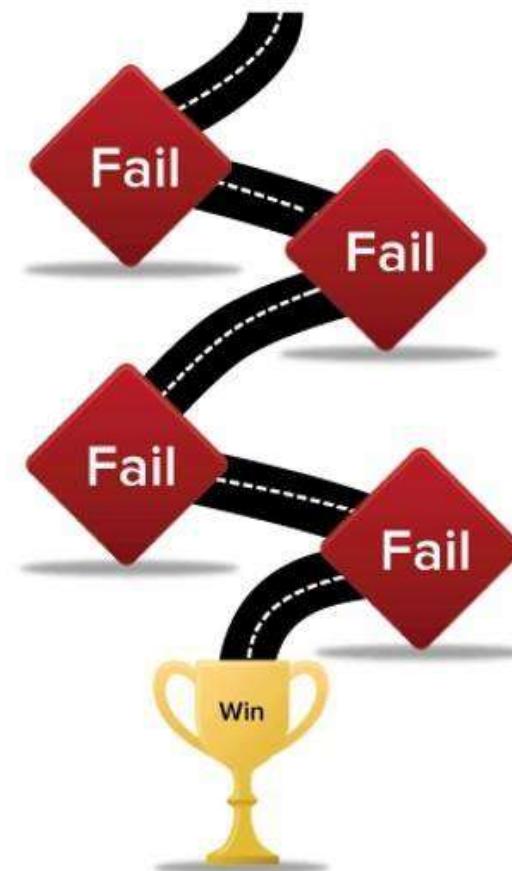
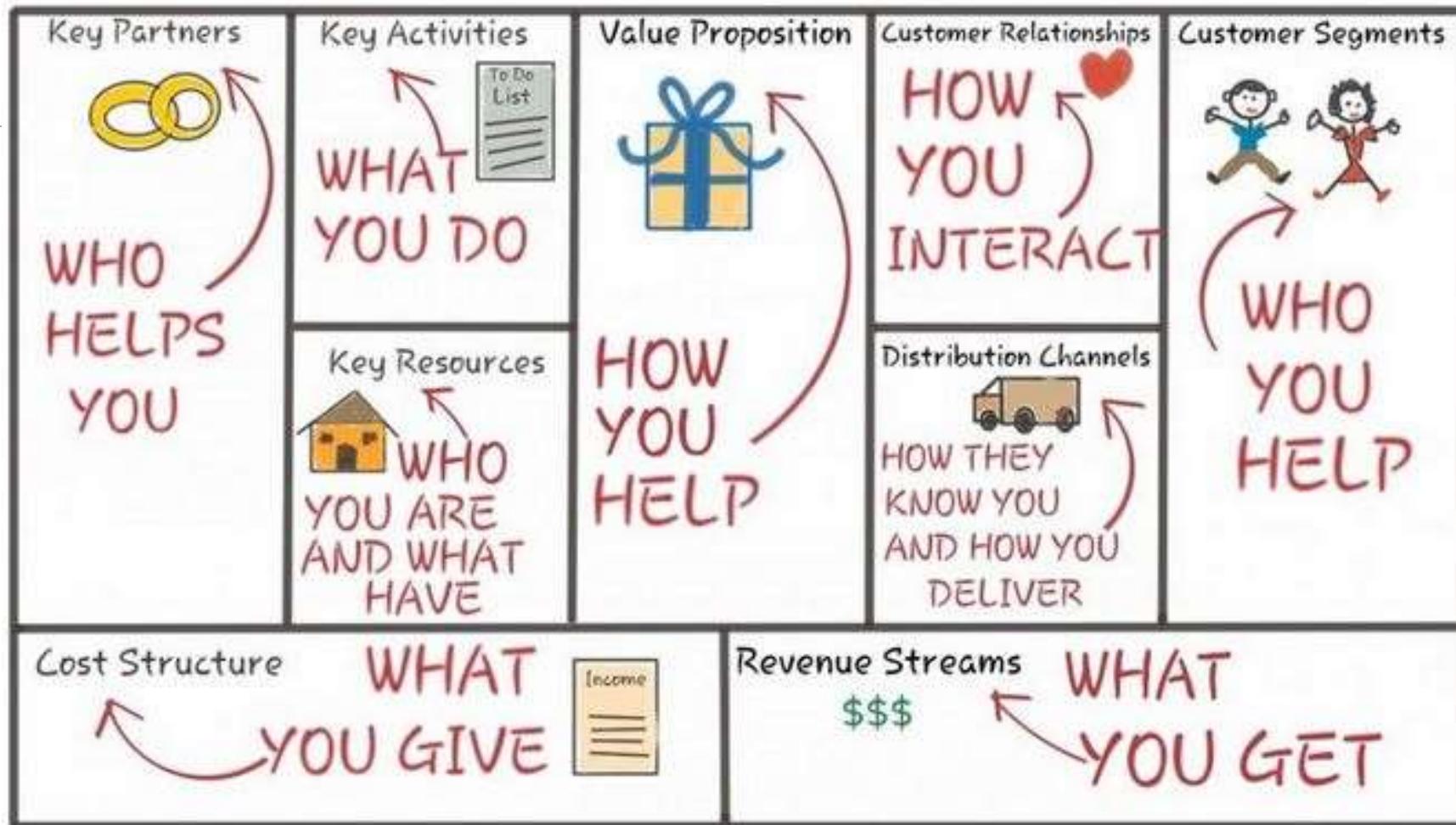


Image credit: Ganindu Nanayakkara, second runner up in the Transportation category of the Verizon Powerful Answers Award

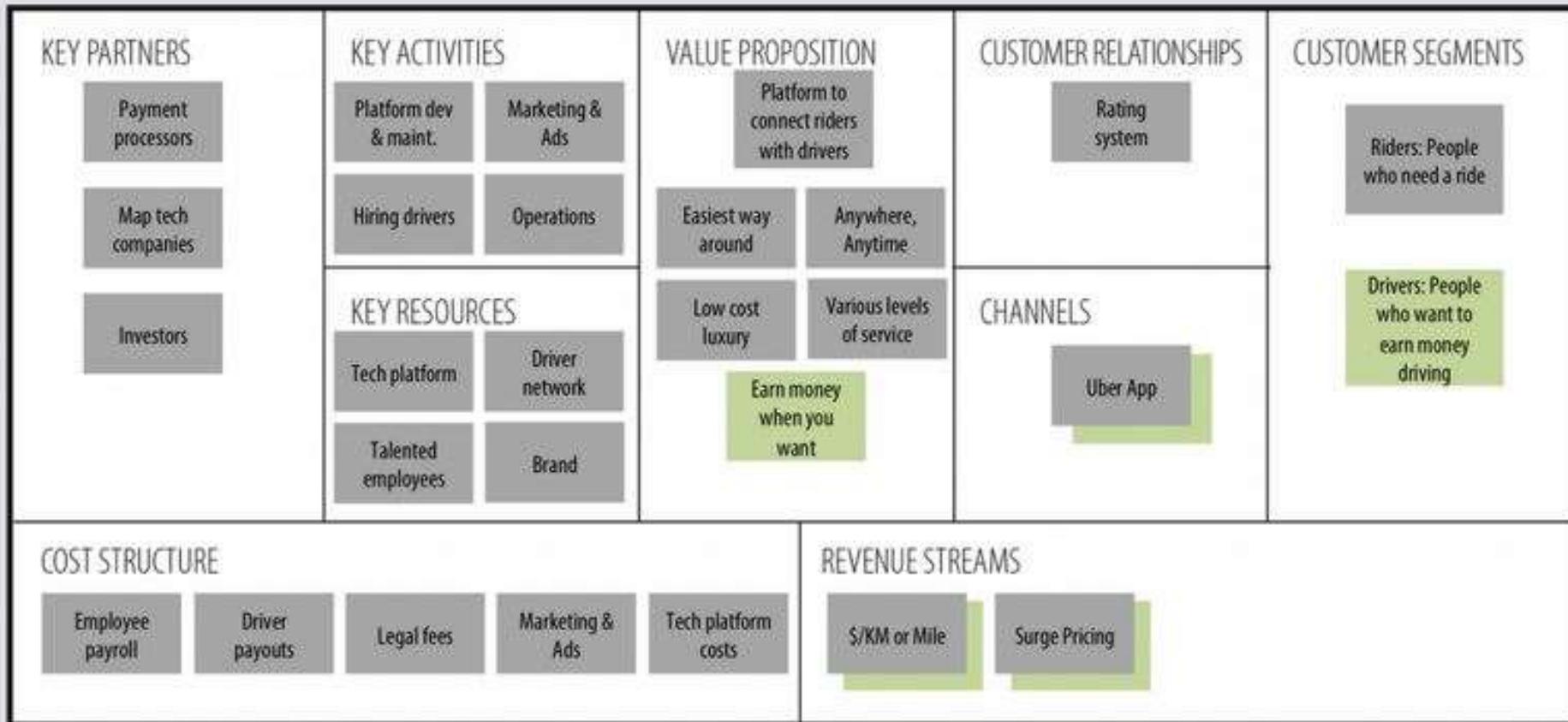
# Business Model Canvas



Alex Osterwalder

# BUSINESS MODEL CANVAS

# UBER



DESIGNED BY BUSINESS MODEL FOUNDRY AG

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171 Second Street, Suite 300, San Francisco, California, 94107, USA.

# Lean Canvas

Lean Canvas is a 1 page business plan template created by Ash Maurya, adopted from BMC.



# Group Work

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How to commercialize your <sup>nd</sup> Year project?



- Value proposition



- SWOT Analysis



- PEST Analysis



- Strategies



- Lean Canvas

# Submission

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Do the group work mentioned in the previous slide using Microsoft Teams meeting.

Submit the group work ~~with~~ a reflective journal about the activity.

Submit your assignment as a PDF on or before midnight ~~May~~,  
2021.

Thank You.

# Laws related to ICT

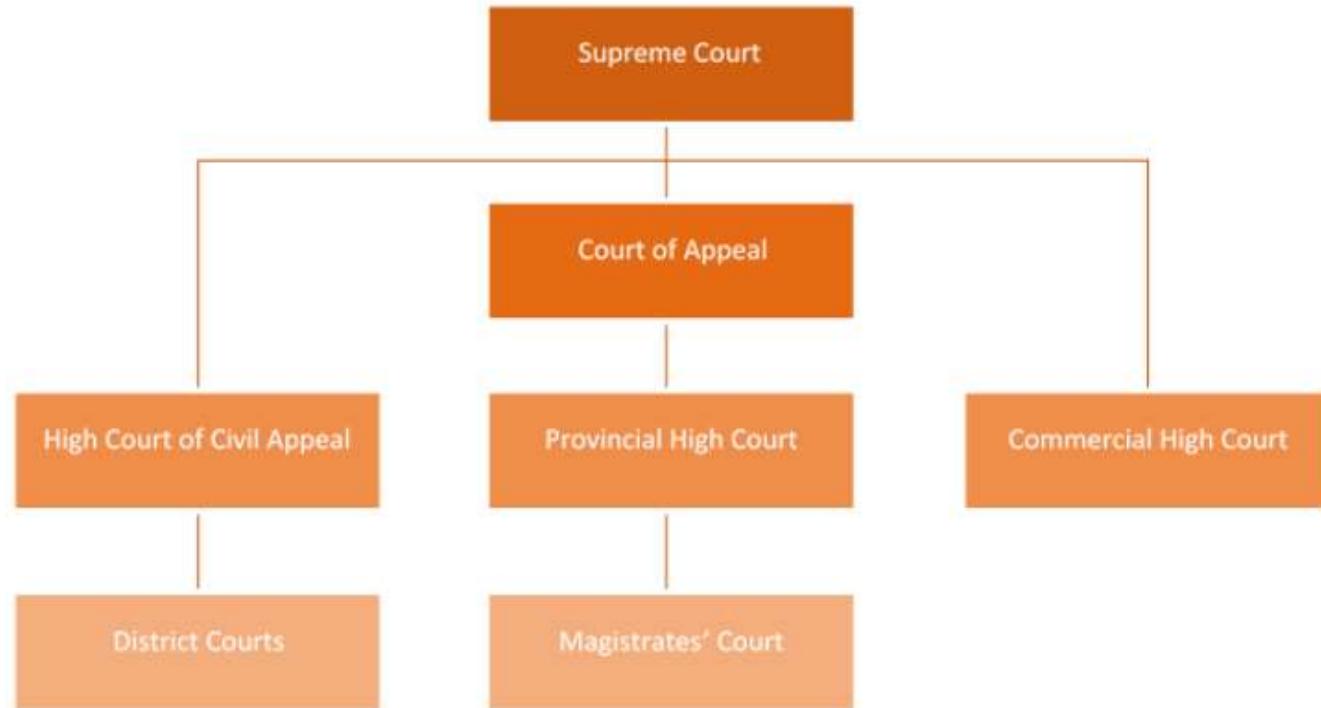
PROF KOLIYA PULASINGHE

# Introduction

- ▶ Introduction to Sri Lankan Legal Systems
- ▶ ICT Related Acts
  - ▶ Evidence (Special Provisions) Act, No 14 of 1995
  - ▶ Intellectual Property Act, No 36 of 2003
  - ▶ Electronic Transactions Act, No 19 of 2006
  - ▶ Payment Devices Frauds Act, No. 30 of 2006
  - ▶ Computer Crimes Act, No 24 of 2007
- ▶ Summary

# Introduction to SL Legal System

- ▶ Executive Presidency, Judiciary, Legislature
- ▶ Laws are enacted by Legislature
- ▶ Criminal offences such as rape, murder, sexual abuse are handled by a Magistrates' courts results in fine or jail term
- ▶ Civil cases are handled by District courts cover almost all other disputes, and typically aim for some sort of recovery or compensation



## ICT related Acts:

- ▶ Evidence (Special Provisions) Act, No 14 of 1995
- ▶ Intellectual Property Act, No 36 of 2003
- ▶ Electronic Transactions Act, No 19 of 2006
- ▶ Payment Devices Frauds Act, No. 30 of 2006
- ▶ Computer Crimes Act, No 24 of 2007

# Evidence (Special Provisions) Act No. 14 of 1995

- ▶ Provides for
  - ▶ (a)the admissibility of any contemporaneous recording made by electronic means and
  - ▶ (b)facts and information contained in a statement produced by a computer
- ▶ Admissibility under this Act is subject to several conditions – that the computer producing the statement was operating properly, Information supplied to the Computer was accurate etc

# Intellectual Property Act, No 36 of 2003

- ▶ Computer Programs are protected under Intellectual works protected under the act
- ▶ Under the economic rights: “owner of copyright of a work shall have the exclusive right to carry out or to authorize the following acts in relation to the work”
- ▶ Under the act, Private reproduction of a published work in a single copy shall be permitted;
- ▶ Any person has access to a computer program infringing the rights of another person, and wilfully makes use of such program for commercial gain, shall be guilty of an offence and shall be liable on conviction by a Magistrate for a fine not exceeding rupees **five hundred thousand** or to imprisonment for a period of **six months** or to both such fine and imprisonment.

# Electronic Transactions Act, No 19 of 2006

- ▶ AN ACT TO ***RECOGNISE AND FACILITATE*** THE FORMATION OF CONTRACTS, THE CREATION AND EXCHANGE OF DATA MESSAGES, ELECTRONIC DOCUMENTS, ELECTRONIC RECORDS AND OTHER COMMUNICATIONS IN ELECTRONIC FORM IN SRI LANKA
- ▶ All transactions and business done in “electronic” form would be recognized under the Act, except those specifically excluded under Section 23 (Last Wills, Power of Attorney, Transfer of immovable Property etc)

# Electronic Transactions Act, No 19 of 2006

- ▶ Section 4 -Electronic equivalent of “Writing” - “Functional equivalence” principle
- ▶ Section 5 & 6: Maintaining originality and Retention in Electronic Form
- ▶ Section 8: Facilitates e Government
- ▶ Section 11 to 17: Electronic Contracts

# Electronic Transactions Act, No 19 of 2006

- ▶ Section 7: Legal Validity of Electronic Signatures
  - ▶ Method used is proven in fact to have fulfilled the functions of identifying the party and proving the party's intention in respect of the information contained in the message, by itself or together with further evidence
  - ▶ method is as reliable as appropriate for the purpose for which the electronic communication was generated or communicated in the light of all the circumstances, including any relevant agreement;
  - ▶ Any technology is acceptable - PIN No, QR Codes, Biometrics, Scanned signature etc.
  - ▶ Digital Certificates issued by "Certificate Service Provider" ensures Legal validity

## Payment Devices Frauds Act, No. 30 of 2006

- ▶ Aims of the act:
  - ▶ To prevent the possession and use of unauthorised or counterfeit payment devices
  - ▶ To create offences connected with the possession or use of unauthorised payment devices
  - ▶ To protect persons lawfully issuing and using such payment devices
  - ▶ To make provision for the investigation, prosecution and punishment of offenders

## Payment Devices Frauds Act, No. 30 of 2006

- ▶ A person guilty of an offence under this Act shall, on conviction after trial before the High Court:
  - ▶ In severe cases (as mentioned in item a. to j.) be liable to a term of imprisonment not exceeding **ten years** or to a fine not exceeding **rupees five hundred thousand** or to both such imprisonment and fine
  - ▶ In not so severe cases (item m. to p.) be liable to a term of imprisonment not exceeding **three years** or to a fine not exceeding **one hundred thousand rupees** or to a fine which may extend to **five times** the value of the money obtained by the commission of the act

## Computer Crimes Act, No 24 of 2007

- ▶ Aims of the act:
  - ▶ To provide for the identification of computer crime
  - ▶ To provide the procedure for the investigation and prevention of such crimes
  - ▶ To provide for matters connected therewith and incidental thereto.

# Computer Crime

Securing unauthorised access to a computer an offence.

## PART I

### COMPUTER CRIME

3. Any person who intentionally does any act, in order to secure for himself or for any other person, access to—
  - (a) any computer ; or
  - (b) any information held in any computer,

knowing or having reason to believe that he has no lawful authority to secure such access, shall be guilty of an offence and shall on conviction be liable to a fine not exceeding one hundred thousand rupees, or to imprisonment of either description for a term which may extend to five years, or both such fine and imprisonment.

Doing any act to  
secure  
unauthorised  
access in order to  
commit an  
offence

4. Any person who intentionally does any act, in order to secure for himself or for any other person, access to—
  - (a) any computer ; or
  - (b) any information held in any computer,

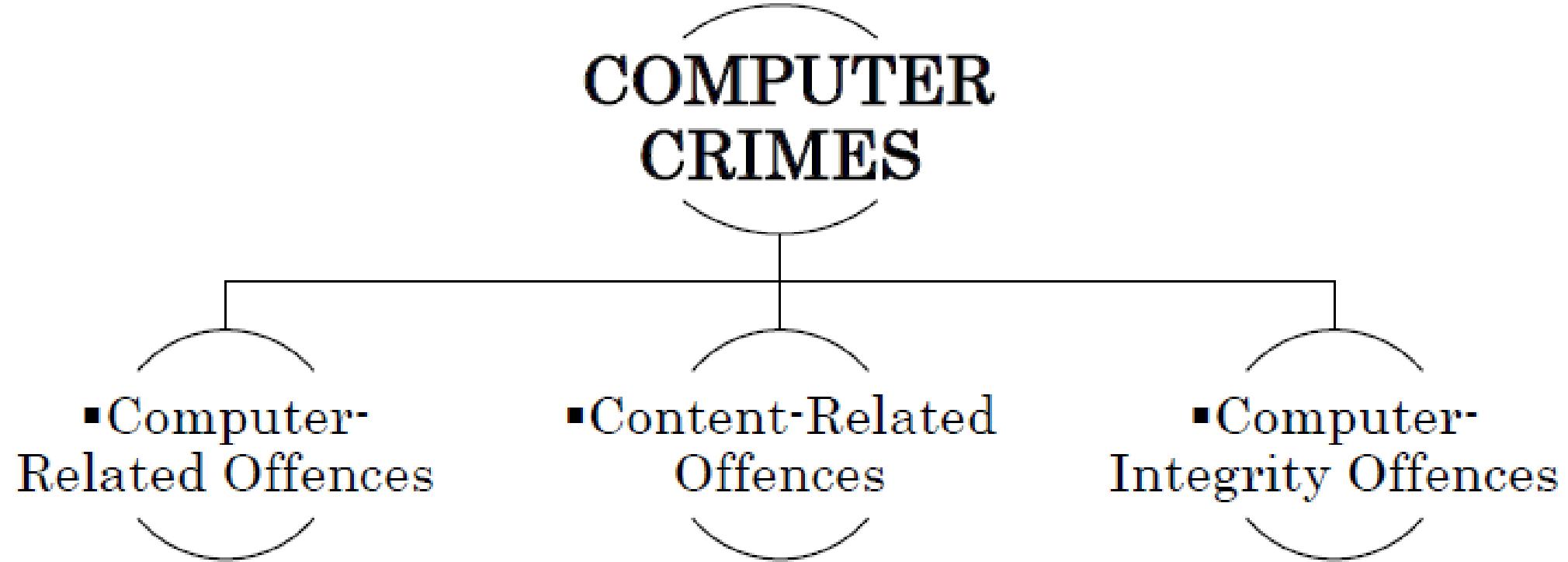
knowing or having reason to believe that he has no lawful authority to secure such access and with the intention of committing an offence under this Act or any other law for the time being in force, shall be guilty of an offence and shall on conviction be liable to a fine not exceeding two hundred thousand rupees or to imprisonment of either description for a term which may extend to five years or to both such fine and imprisonment.

# Computer Crime

Explanation 1— for the purposes of paragraph (a)  
the mere turning on of a computer is sufficient.

Explanation 2— for the purposes of paragraph (b)-

- (a) there should be an intention to sccure any programme or  
data held in any computer ;



# Computer-related Crimes..



Computer  
Related Frauds



Theft of  
Information



Forgery

# Computer-related Crimes..



Identity  
Theft



Phishing



Cyber  
Squatting

# Content-Related Crimes..



Illegal  
Content



Infringement  
of Right to  
Privacy



Infringement  
of Freedom of  
expression

# Computer-Integrity Offences..



Unauthorized  
Access



Unauthorized  
Acts



Unlawful  
Devices

## Search and Seizure

- On application made, for the purpose of investigation, a magistrate would grant an expert or a police officer the authority to search and seizure with warrant
- Any Police Officer may in the course of investigating, exercise power of arrest, search or seizure of any information accessible within any premises.

## Confidentiality of information obtained

- Every person engaged in an investigation under this act shall maintain strict confidentiality with regard to all information obtained in the course of an investigation

Section 18

Section 21

Section 24

# Summary

- ▶ All these Laws have been enacted to have safe environment for computer use by general public to various activities in day today life without fear
- ▶ And punish those who do wrongful acts
- ▶ Professionals in ICT area must be thorough with these Laws to engage in their professional practice

# Assignment

- ▶ Task 1: Find out four cases reported in media that come under the purview of these Acts of Law. Write short description (200 words max) about each.
- ▶ Task 2: Reflect on impact of above Laws on your professional career. Write down your own rules for your professional life.
- ▶ Submit PDF of your assignment on or before 25<sup>th</sup> May, 2021 mid night.