Soft Skills for Engineers
(48 h /1,5 ECTS)

Overall Agenda

I. Soft Skills Introduction

1.1 Leadership skills
1.2 Situational Leadership
1.3 Communication/ Platform skills
1.4 Conversation techniques
1.5 Presentation techniques
1.6 Business meeting
1.7 Transformational versus Transactional Leadership Theory

II. Soft Skills (part 2)

2.1 Emergence of conflicts
2.2 Conflict management
2.3 Types of conflicts
2.4 Conflict progression
2.5 Conflict resolution
2.6 Communicating with groups (Platform skills)
2.7 Etiquette (guide) and career

Overall Agenda

III. Project Management

3.1Project Management Plans

3.2 Project Marketing

3.3 Performance Management

IV. Scientific Work Methods

4.1 Documentation

V. Time Management

5.1 Introduction - Understanding Time Management

5.2 Monochronic and Polychronic Views of Time

5.3 Elements of Effective Time Management

VI. The Importance of Soft Skills at the Labour Market

6.1 Employability

6.1 Labour Market marketing strategy

Introduction to Soft Skills

Introduction to Soft Skills

- Purpose of this lecture:

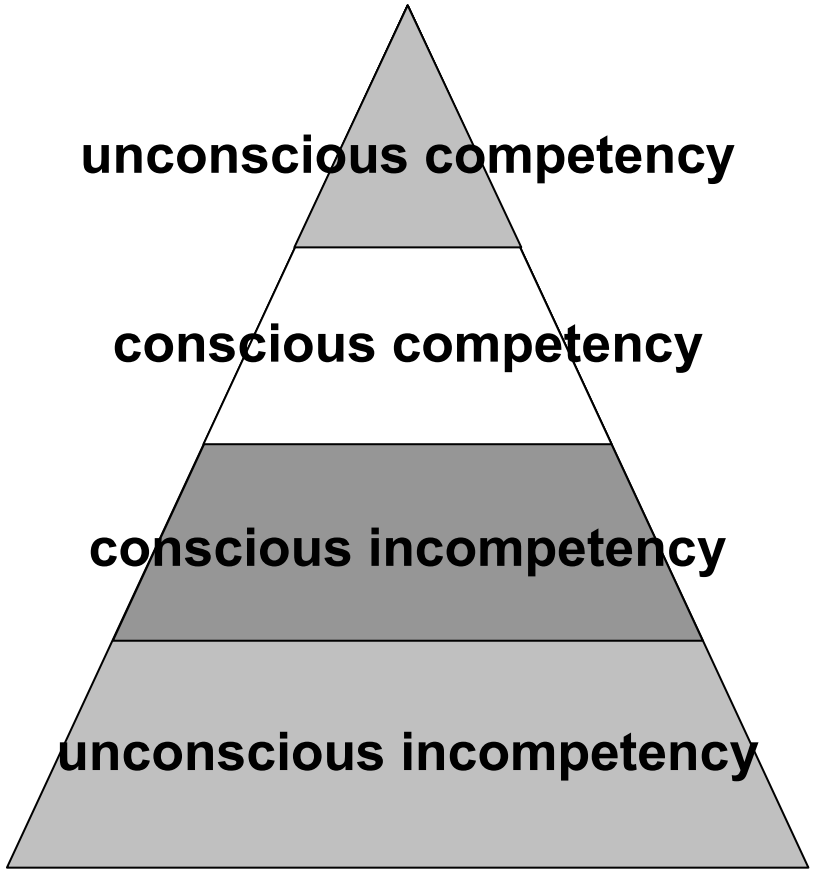
  – To provide communicative skills and tools which enable you to fulfil your current and future tasks superiorly!
  – You will become acquainted with methods which
    - you might recognise or realise that you already apply,
    - you will be able to apply immediately,
    - you have to train,
    - you will be able to work/lead a team
    - manage conflicts
    - make good presentations
    - SELF MOTIVATION!!!

Presentation techniques,
Nonverbal communication
Goal orientation and
Self-motivation.

Soft Skills – Getting Started

- Neither
  extensive intelligence
  nor
  further talents
  are required to be successful in any field, but solely

  TRAINING,
  TRAINING,
  TRAINING!



Hard Skills vs. Soft Skills

Hard skills:

- what might appear on the resume
- level of expertise
- degrees,
- certifications,
- job titles,
- computer lingo
- technical know how

Soft Skills:

– are often difficult to define analytically,
– are too indistinct to differentiate from each other,
– have a lot of intersections and dependencies.

Research suggests that they are just as good an indicator of job performance as traditional job qualifications or hard skills…

What are Soft Skills?

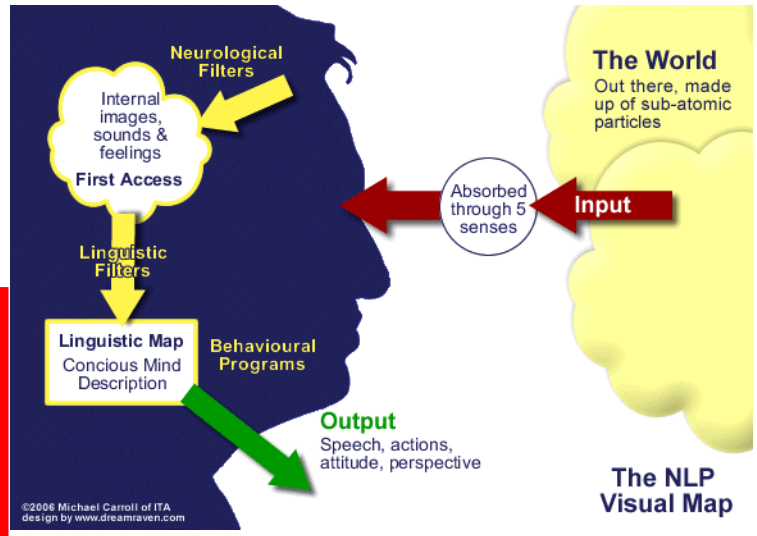
- These main groups belong to Soft Skills:
  - Communication skills
  - Intellectual skills
  - Leadership skills
  - Methodological compe
  - Personal (self-) manag
  - Social competence
  - Business ethics
  - Knowledge management

Communication
is a so called
Meta Soft Skill,
since it is present
in every other
Soft Skill.

Soft Skills - Neuro Linguistic Programming

Neuro

Nervous system through which experience is received and processed through the five senses.



Linguistic

Language and nonverbal communication systems through which neural representations are coded, and given meaning.

Programming

The ability to organize our communication and neurological systems to achieve specific desired goals and results.

What are Soft Skills?

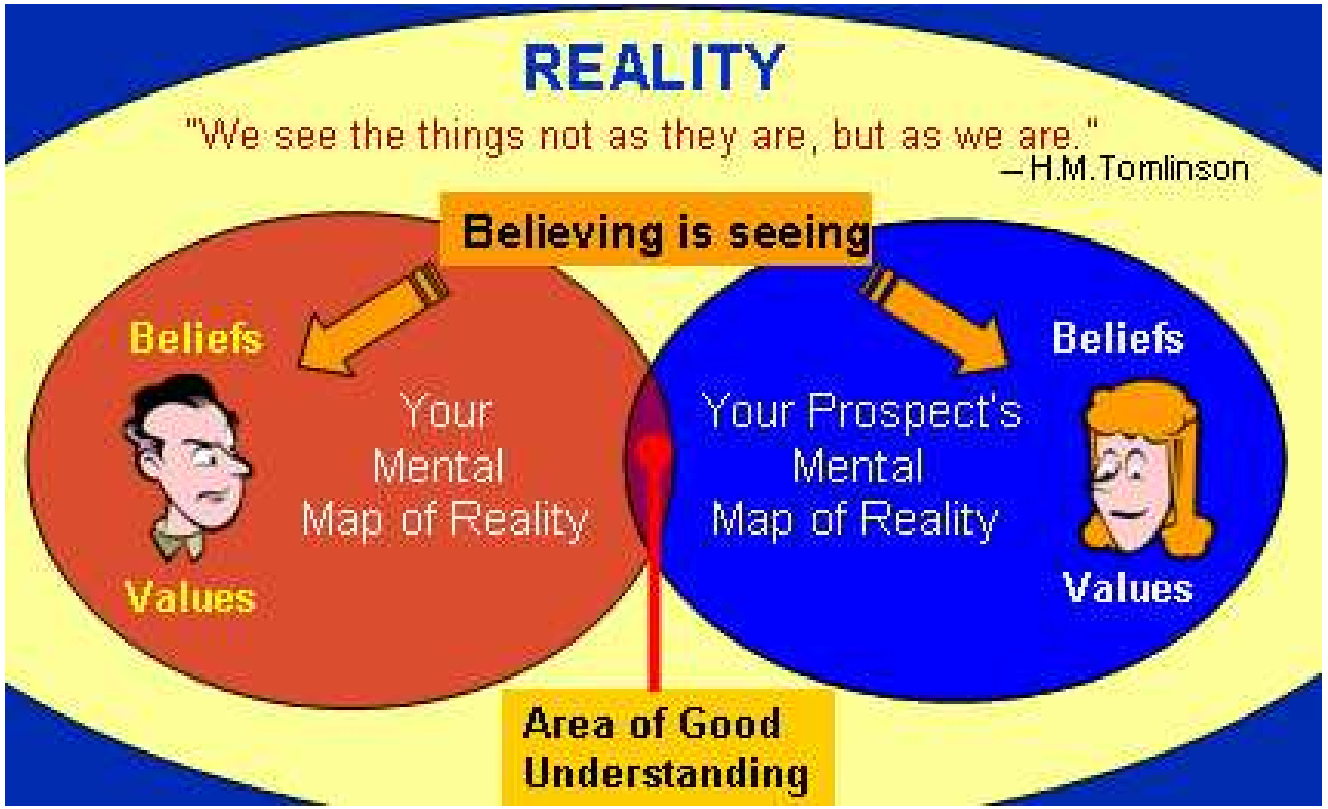
- Soft Skills are primarily related to **communication**:
  - Communication by themself and to fellow human beings (both verbal and nonverbal)

- According to an IBM-study career-enhancing factors are:
  - 60 % valuable contacts
  - 30 % appearance
  - 10 % technical qualification

These are 90 % Soft Skills!

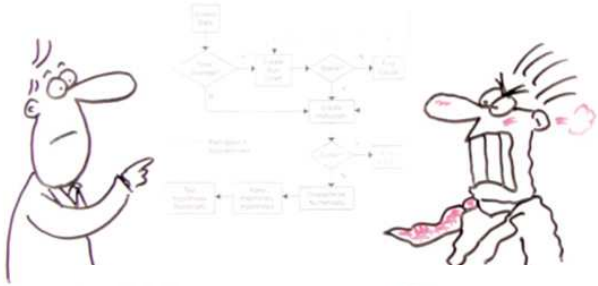
What are Soft Skills

“We carry all the necessary resources within us to accomplish desired changes.”



Soft Skills – Getting Started

Flexibility of thinking is needed respond to thinking along the way

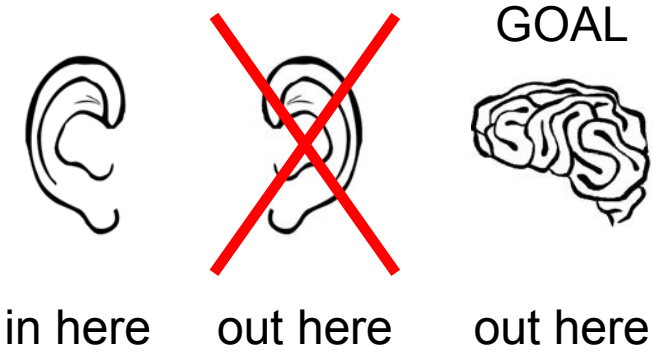


Project managers should focus on desired outcomes

What else could happen as a result of this outcome and is there anything good about the present situation that could be lost?

Soft Skills – Getting Started

- Training advice:



Training Example 1
- Sensory acuity
- Pacen (*posture*)
- Questions

Training Example 2
- Diversity in behaviour (≥ *3*)
- Controlled dialogue
- Eye movements

Training Example 3
- Lucid objectives (*SMARTS*)
- Self message
- My own values

What are Soft Skills?

- Soft Skills can be described metaphorically as

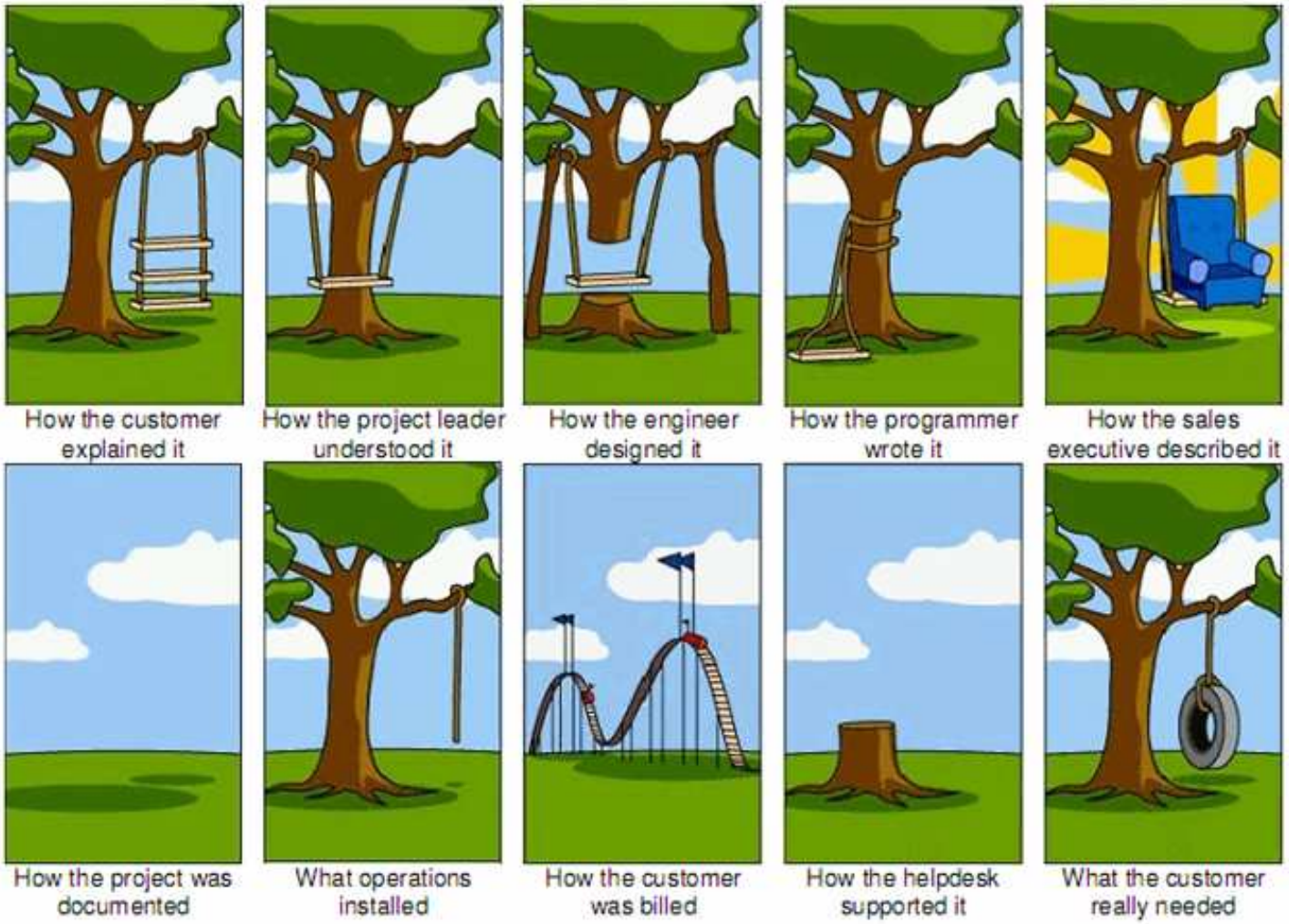
  – Bridge construction to other people

[Source: Fotolia, Volker Schuhmaier]

  – They are as important for a human as a pair of healthy legs for a runner.

[Source: dadp-bln, marathon run Berlin, Sept. 2010]

What are soft skills?



Importance of “Soft Skills” on the Labour Market

With above-average qualifications, you have an excellent chance to work at Audi. However, we don't simply judge a person based on his or her qualifications. We take a close look at the applicant's
overall qualities. Along with specialised knowledge - and depending on the department you want to work in - the most important criteria include the following:

- Fluency in German and English - both written and spoken
- Solid customer orientation
- International skills
- Interdisciplinary abilities
- Knowledge of foreign languages
- Ability to work in teams
- Ability to work methodically

Flexibility
Reliability
Self-confidence
Politeness and Style
Communication

What is Leadership?

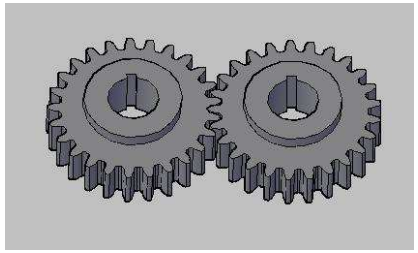
Leadership is a process by which a person influences others to accomplish an objective and directs the organization in a way that makes it more cohesive and coherent.

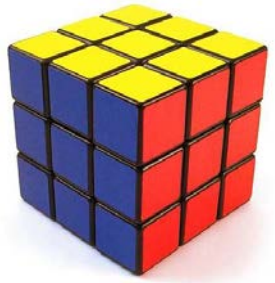
Leadership Skills
Are Leaders Born or Made?

“A leader is best when people barely know that he exists”

Good leaders are **made** not born. If you have the desire and willpower, you can become an effective leader. Good leaders develop through a never ending process of self-study, education, training, and experience.

Leadership is about:





LEADERSHIP IS ACTION NOT POSITION

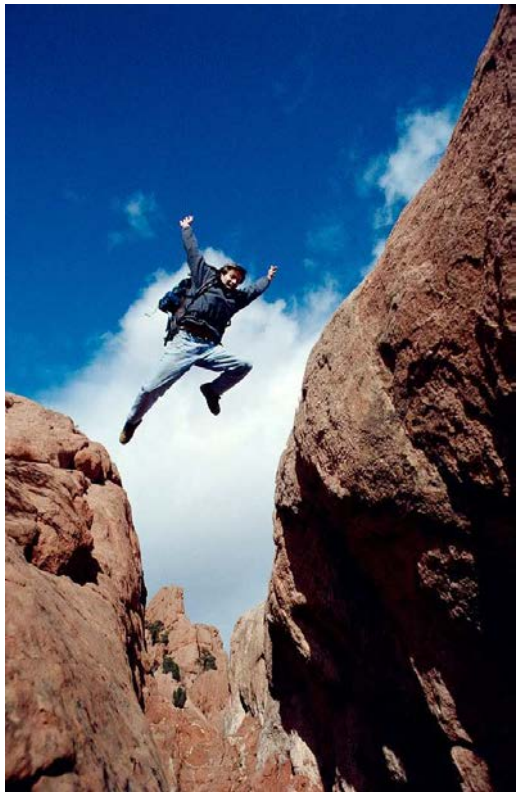
Leadership like swiming cannot be learnt by reading about it

Systembolaget
Hantverksvägen 2-8
S-436 33 ASKIM
031/28 23 30
OrgNr: 556059-9473

Förs : 1424wiul But: 1424 Nr: 6206
Datum : 2009-11-30 15:36 Ka: 6

Krusovice Imperial 5% 500 ml brk				
1528-02	2	*	14,90	29,80
Pilsner Urquell 4,4% brk 500 ml				
1568-02	2	*	16,90	33,80
Saku Kuld 5,2% 500 ml				
1572-01	2	*	14,90	29,80
Eriksberg 5,3% 500 ml				
1584-01	2	*	15,30	30,60
Litovel Premium 5% 500 ml				
1302-01	2	*	14,70	29,40
TOTAL				153,50

Totalt antal artiklar: 10



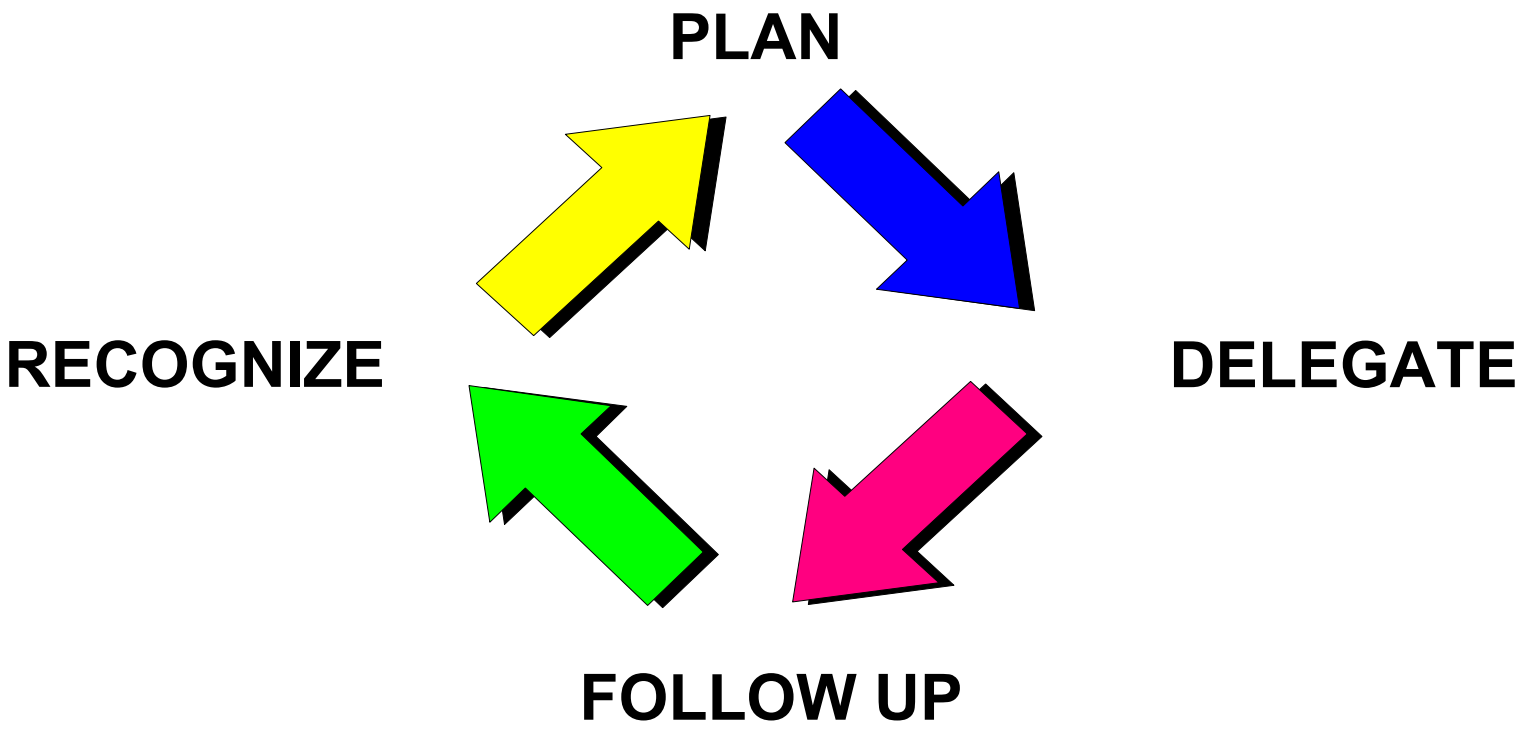
Leadership Skills
Supervision – Management – Leadership

Are they the same? Are they different?

Leaders are people who do the right thing;
managers are people who do things right
– A. Einstein

Leadership Skills
General Leadership Cycle

Common to all leadership styles is a process ,where each has consistent process



Training
Leadership Factors

1. Leadership is the art of getting someone else to do something you want done because he wants to do it (Dwight D. Eisenhower)

2. Leadership is action, not a position *(V. Putin)*

3. The executive is inevitable a father figure. To be a good father, whether it is to his childreb or to his associates, requires that he be understanding, considerate and that he be human enough (M. Luther King)

4. One of the responsibilities of leadership is to seek out and develop the latent talent of those members who, for various reasons, have never had a real chance to demonstrate their ability. (Clem Renouf)

Six leadership styles

1. **Coercive:** The leader who demands immediate compliance: "Do what I tell you!„

2. **Pacesetting:** The leader who sets extremely high standards for performance: "Do as I do, now!"

Six leadership styles

3. **Coaching:** The leader who is focused on developing people for the future: "Try this.„

4. **Democratic:** The leader who achieves consensus thorough participation: "What do you think?" This style builds trust, respect and commitment

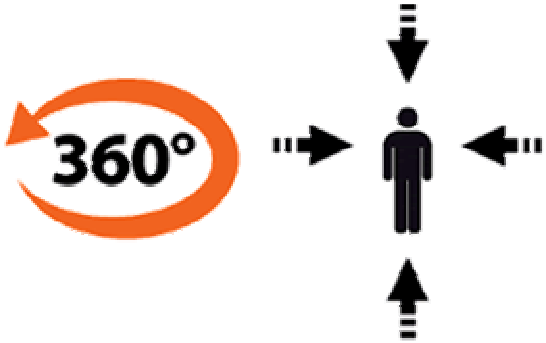
Six leadership styles

5. Affiliative The leader who is interested in creating harmony and building emotional bonds with employees: "People come first.„

6. Authoritative: The leader who mobilises people with enthusiasm and a clear vision: "Come with me."

Leadership Principles

- **Show Interest**
- **Positive Approach**
- **Complaints**
- **Promises**
- **Get the Facts**
- **Discussion Basis**
- **Design an Approach**
- **Explain Why**
- **Admit Mistakes**
- **Reasonable Expectations**
- **Be Prompt**
- **Compliment**
- **Prepare for Change**

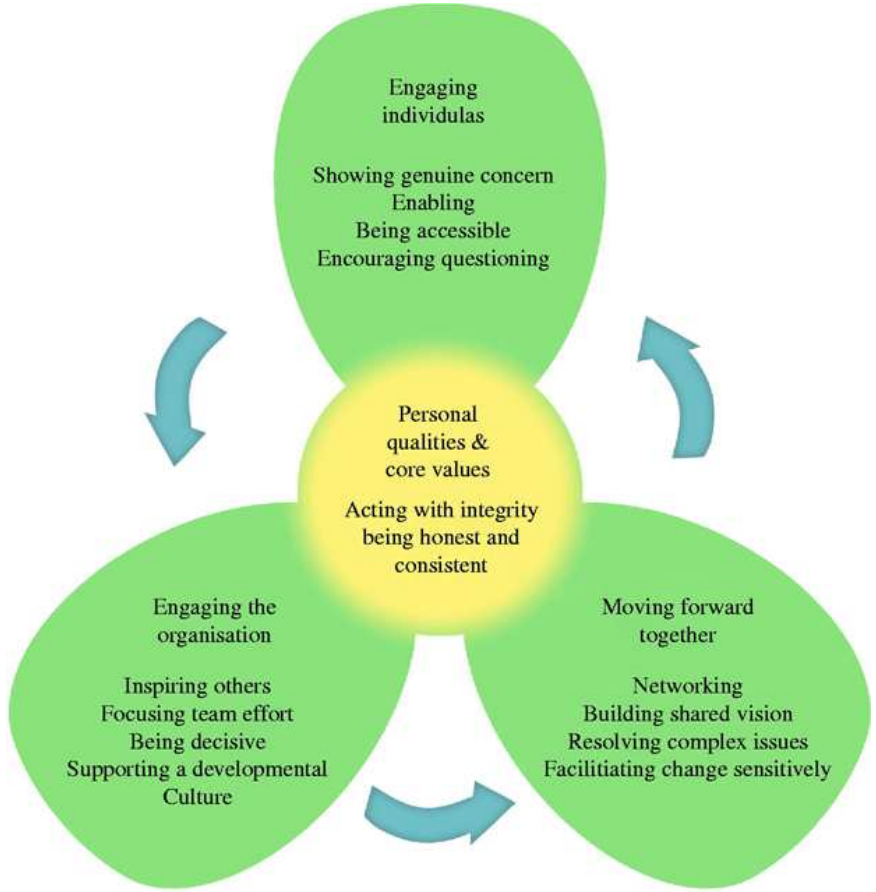


360-degree Analysis

Overview: How can 360 degree Analysis help individual development?

A personal story:

- I went to a supermarket to buy some computer equipment
- I really enjoyed the time at the store.
- When I got home my husband asked: „Did you find what you need?
- „OHHHHH!!!!! I forgot!!!



Source: © Real World group 2010

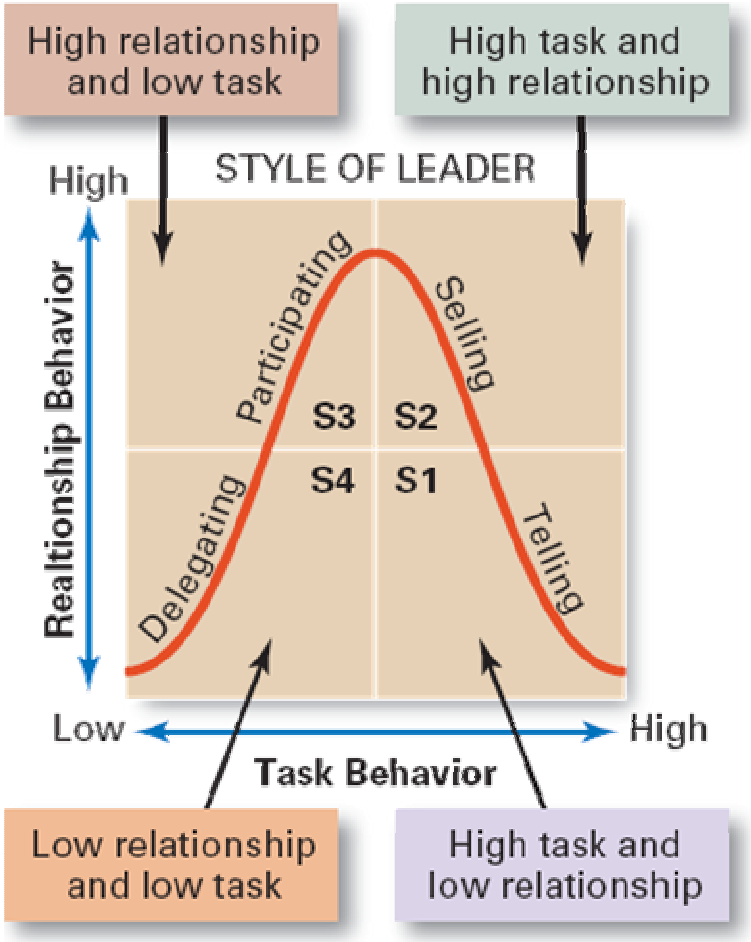
360- degree Feedback

Leadership	Management	Communication Skills

Situational Leadership

- This is a term that can be applied to a style of leadership, but also refers to a leadership model
- A situational leader is one who can adopt different leadership styles depending on the situation.
- The model doesn‘t just apply to people in leadership or management positions: we all lead others at work and at homelead

Situational Leadership



High		Moderate		Low
R4	R3	R2	R1	
Able and willing	Able and unwilling	Unable and willing	Unable and unwilling	

Follower Readiness

LEADERSHIP: Telling people what they want to hear

Or

Taking people where they need to be?

Communication Skills

- Communication is a series of experience of:

Hearing

Touch

Taste

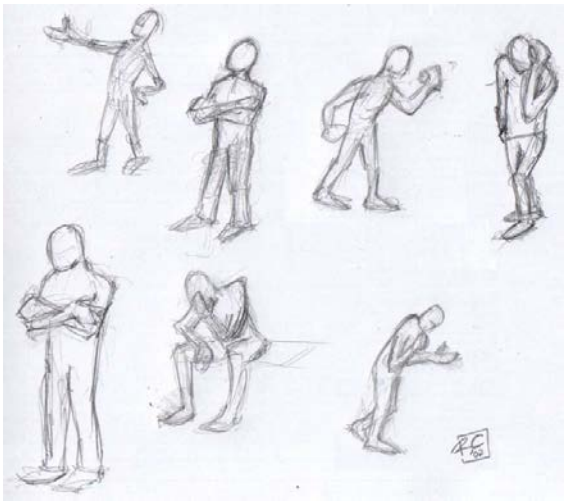
Seeing

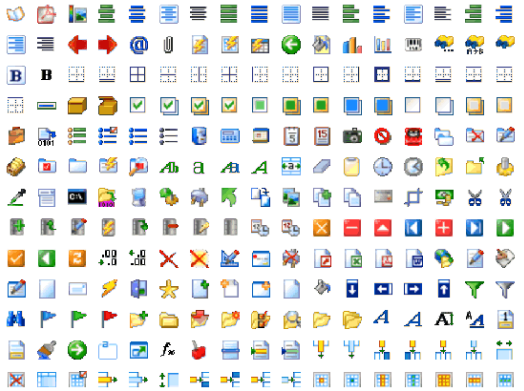
Smell

Communication Handout

Emperor Frederick - the 13th century ruler of the Holy Roman Empire - wanted to know what language had been spoken at the birth of mankind in the Garden of Eden. Was it Hebrew, Greek or Latin? He ordered an experiment in which the original circumstances would be recreated as closely as possible. A group of infants were to be isolated from hearing human speech from the moment of birth until they spoke their language. The babies were to be raised by nurses who were strictly charged to maintain complete silence when with the babies. The result? Every one of the babies died. The lack of communication can be lethal."

Most common ways of communication

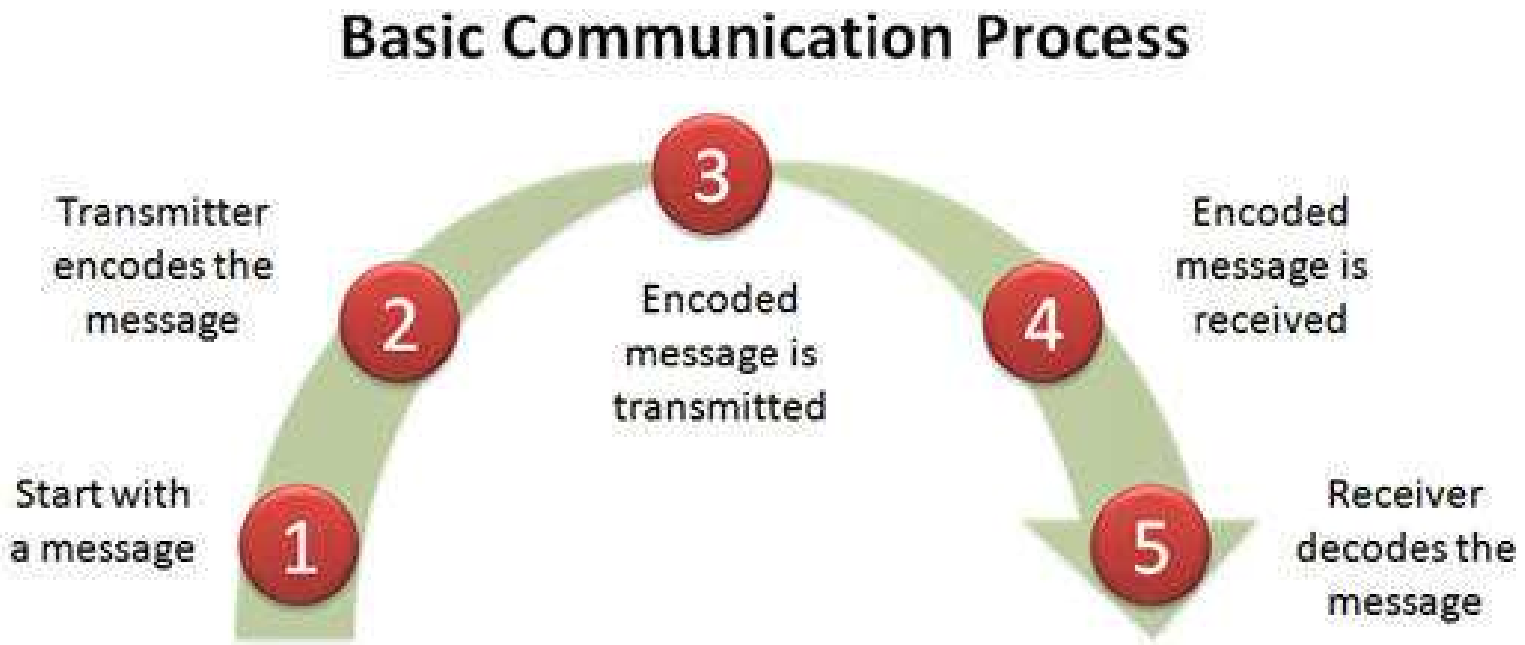




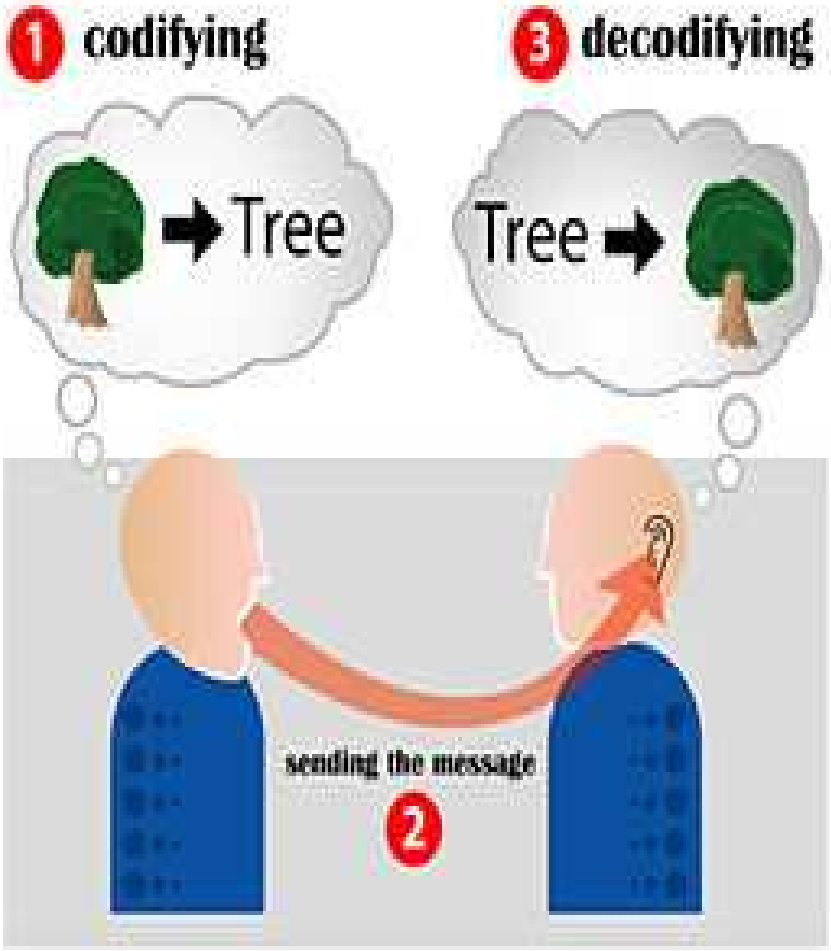
Communication Skills

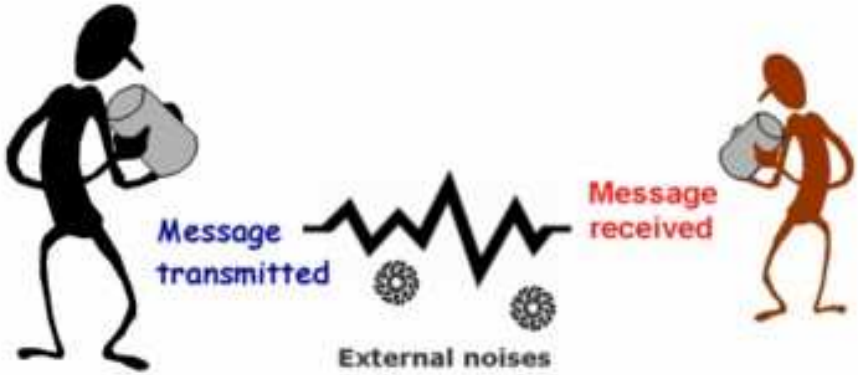
- Barriers of communication:
- Sematntic (Symbols of different meaning, fault translation, specialists language, uncleared assumption)
- Emotional or Psychological
- Organizational (Policy, subordination, complexity in organization, status relation)
- Barriers in Superiors (fear of challenge of authority, lack of time, lack of awareness, unwillingness to communicate, lack of initiative

Communication Skills



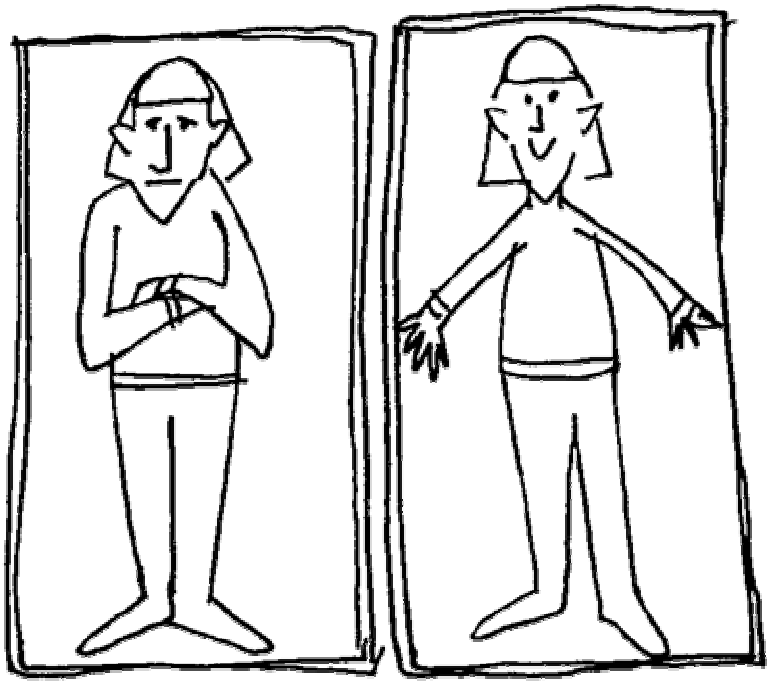
Communication Skills





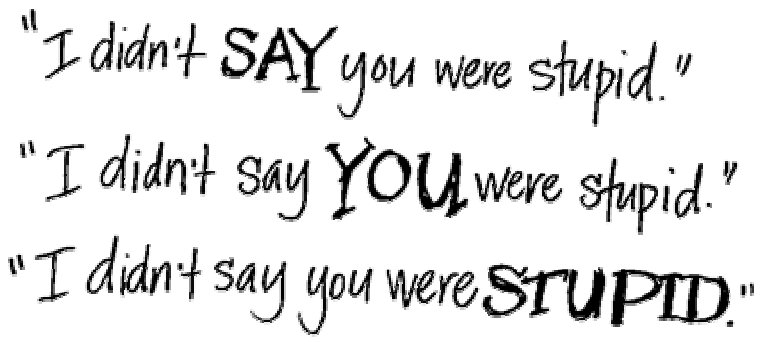
Communication Skills

- Nonverbal messages are the primary way that we communicate emotions



Communication Skills

- Paraverbal Messages

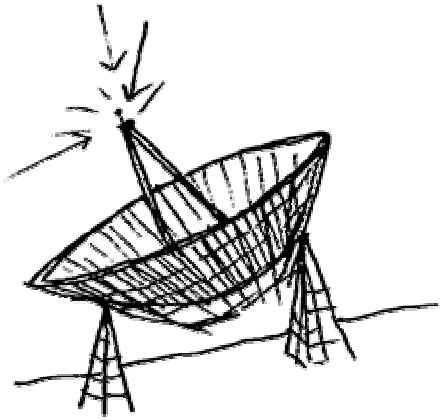


Some points to remember about our paraverbal communication:
When we are angry or excited, our speech tends to become more rapid and higher pitched.
When we are bored or feeling down, our speech tends to slow and take on a monotone quality.
When we are feeling defensive, our speech is often abrupt.

Communication Skills

Listening

1. Requires concentration and energy
2. Involves a psychological connection with the speaker
3. Includes a desire and willingness to try and see things from another's perspective
4. Requires that we suspend judgment and evaluation



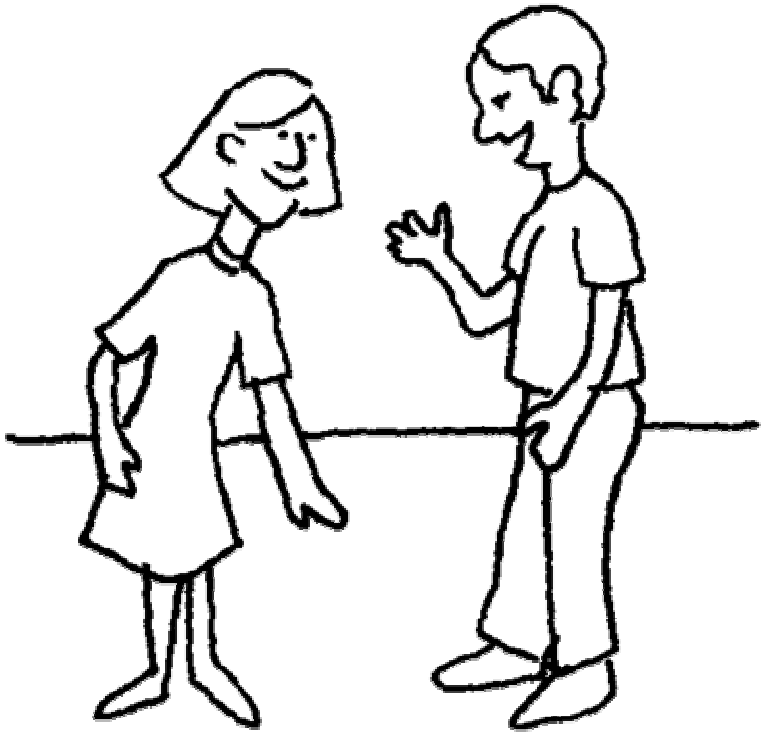
Communication Skills

Giving Full Physical Attention To The Speaker

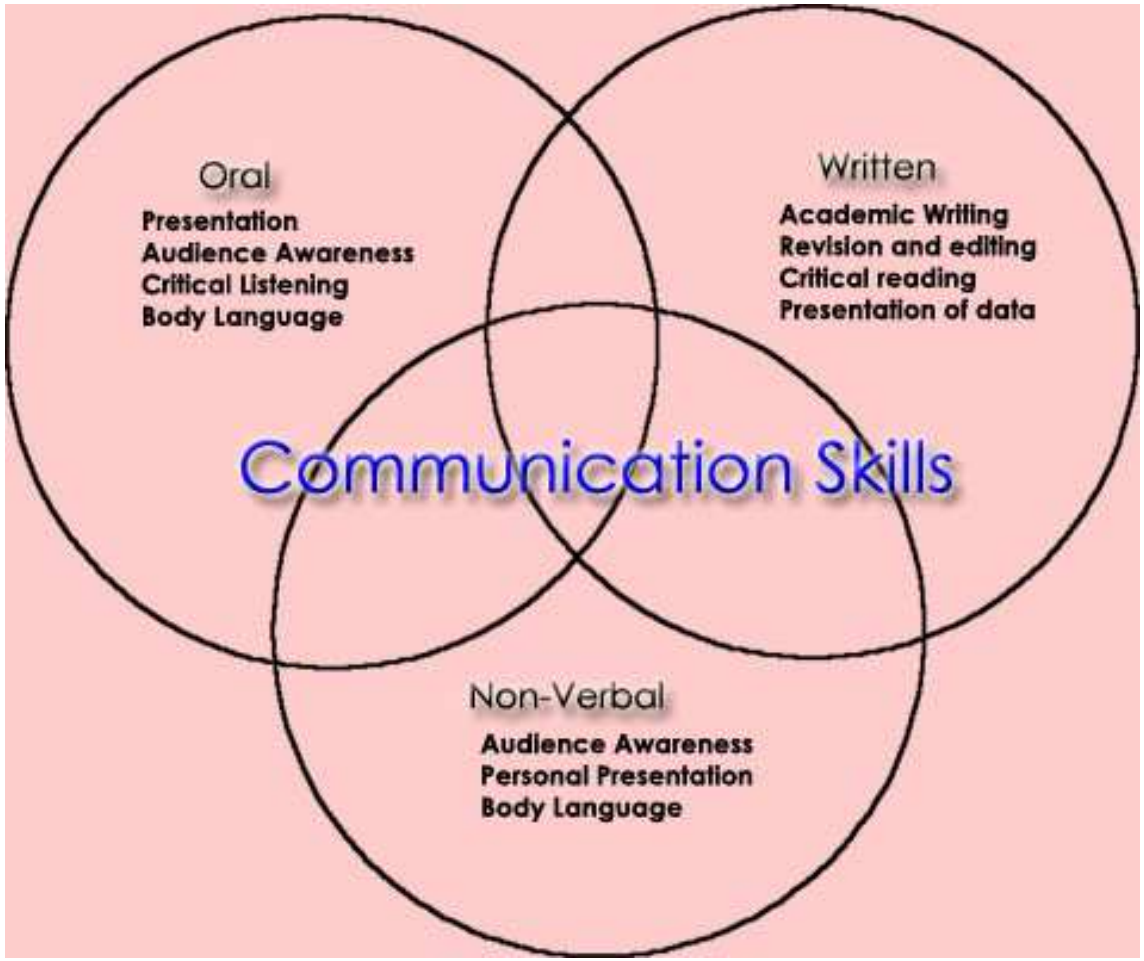
Attending is the art and skill of giving full, physical attention to another person.

We create a posture of involvement by:

- Leaning gently towards the speaker;
- Facing the other person squarely;
- Maintaining an open posture with arms and legs uncrossed;
- Maintaining an appropriate distance between us and the speaker;
- Moving our bodies in response to the speaker, i.e., appropriate head nodding, facial expressions.



Communication Skills



Presentation Skills

Timing is everything!

Get warmed up!

Presentation Skills

Managing nerves :

There are two types of speakers: those that are nervous and those that are liars.

Mark Twain

Presentation Skills

Love your audience

Presentation Skills

Three stages of your presentation:

1. Design → What is message

Pressentation skills

2. Construction

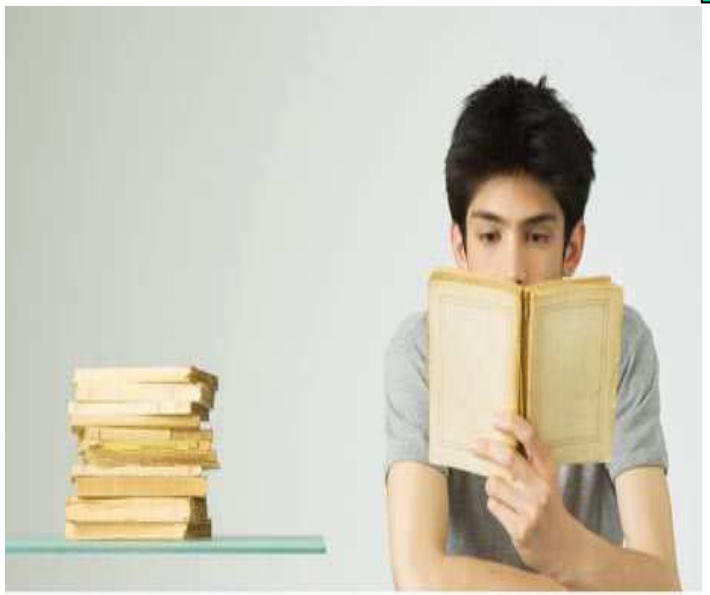
Simple text

```
Formatiert eine
nction formatPhone($phoneno) {
$phoneno = preg_replace('[^0-9]', '', $phoneno);
if (substr($phoneno, 0, 1) != '0') $phoneno = "0$p
preg_match('/^(01|0[2-9])([0-9]{3})([0-9]{2
return("$m[1] $m[2] $m[3] $m[4]");
}
```

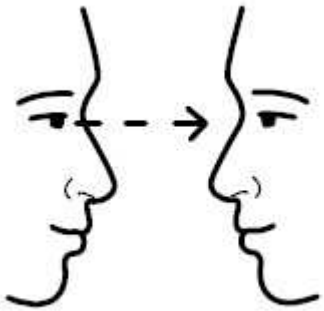
3. Delivery

Know the space

Talk to people, don‘t read

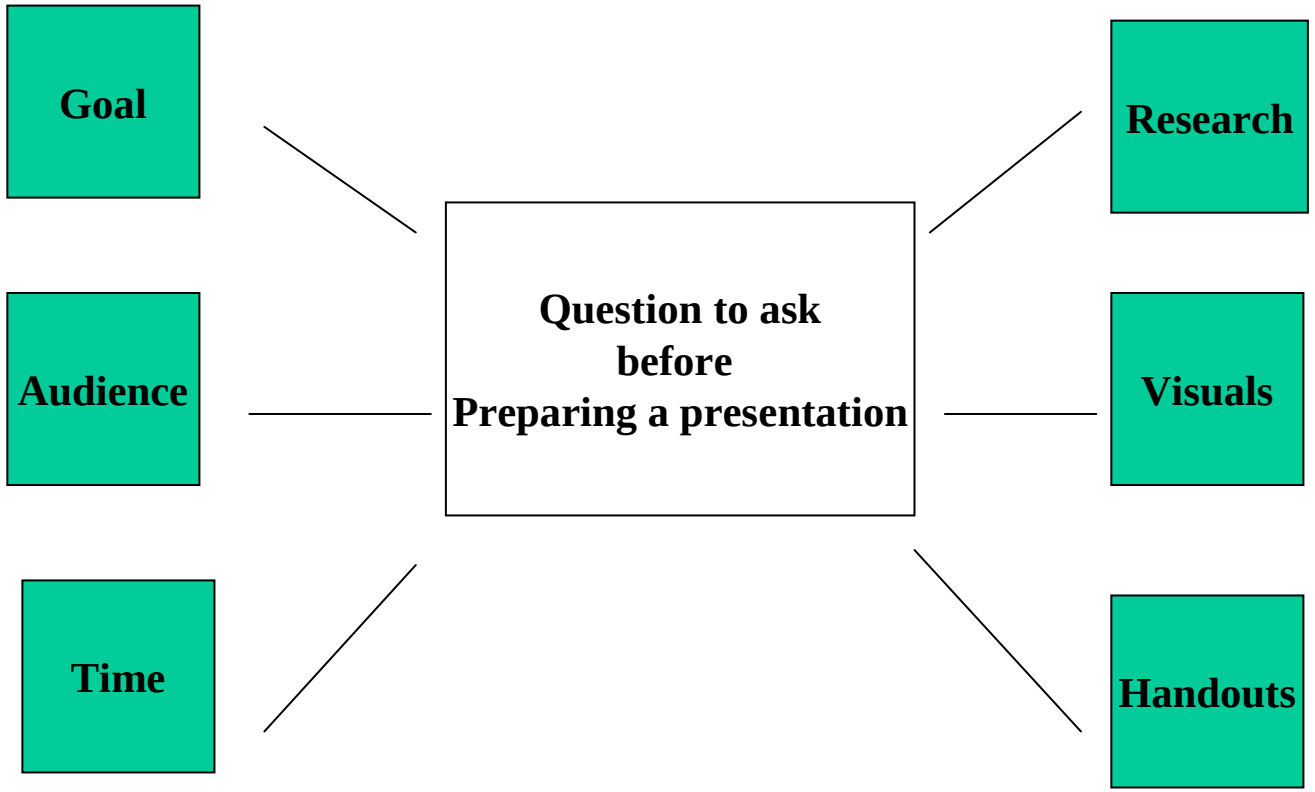


Make eve contact



Pressentation skills

Before your presentation

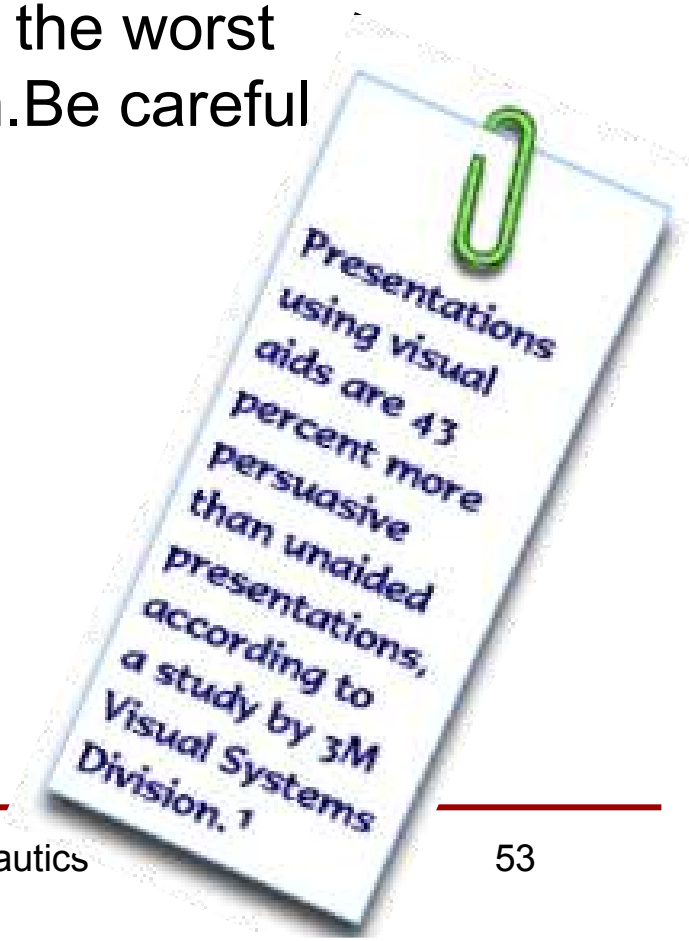


Pressentation skills

Get into small groups of between 3 and 5

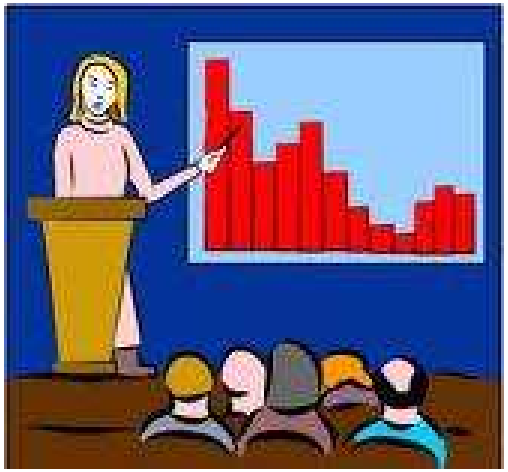
Each tell the rest of your group about the worst and best presentation you have seen.Be careful explain why it was so good/bad

You have 10 minutes



Talk is different to written

- Do not assume too much knowledge
- Better to be too basic than too difficult
- Listeners have one chance to hear and can't "re-read„
- K.I.S.S. (keep it simple stupid)
- Pictures are great for breaking up sections
- Also use charts and graphs to illustrate results /animation example



So: What is AI?

- "A singular consciousness that spawned an entire race of machines" Morpheus, The Matrix
- "The scientific understanding of the mechanisms underlying thought and intelligent behaviour and their embodiment in machines." AAAI
- "Making computers do anything that they can not currently do without human intervention" Karen Petrie

TOO COMPLICATED

Follow the “6 x 6” rule:

Use about six words per line, six lines per slide

✔ DO

✘ DON’T

Always use a font large enough to be seen by all audience members.

Use 32- to 44-point for titles and no smaller than 28-point for the text or bulleted items.

✔ DO

Successes: Decentralization

Senegal:

- Influenced government decentralization policy and implementation through M&E
- Implemented innovative new bilateral program to support decentralization

✘ DON'T

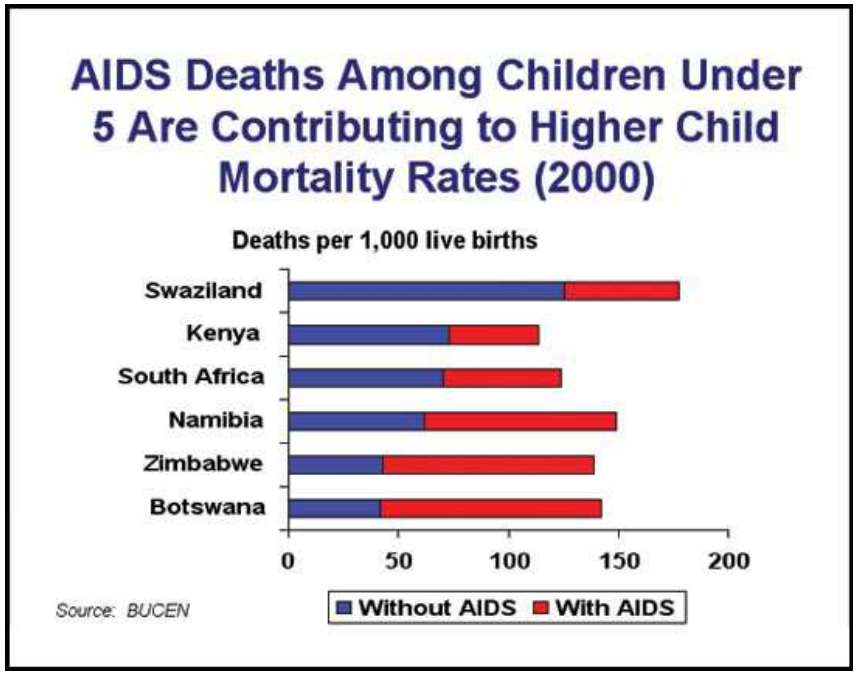
Successes: Decentralization

Senegal:

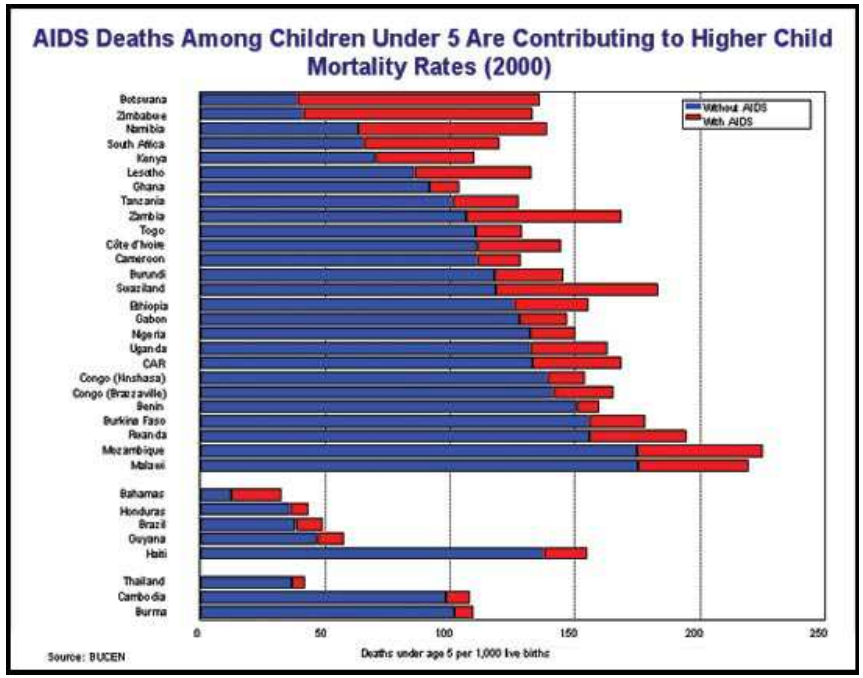
- Influenced government decentralization policy and implementation through M&E
- Implemented innovative new bilateral program to support decentralization

Use simple graphs to communicate findings.

✔ DO



✘ DON'T



When the exact numbers are important and you must use a table, remember the “6 x 6” rule

✔ DO

Factors Influencing Health Seeking Behavior

Variable	In-School (%)	Out-of-School (%)
Talk about sex with friend	69	45
Get information on STI	80	51
Told close friend had STI	73	29
Partner notification	30	37

Source: KDHS

✘ DON’T

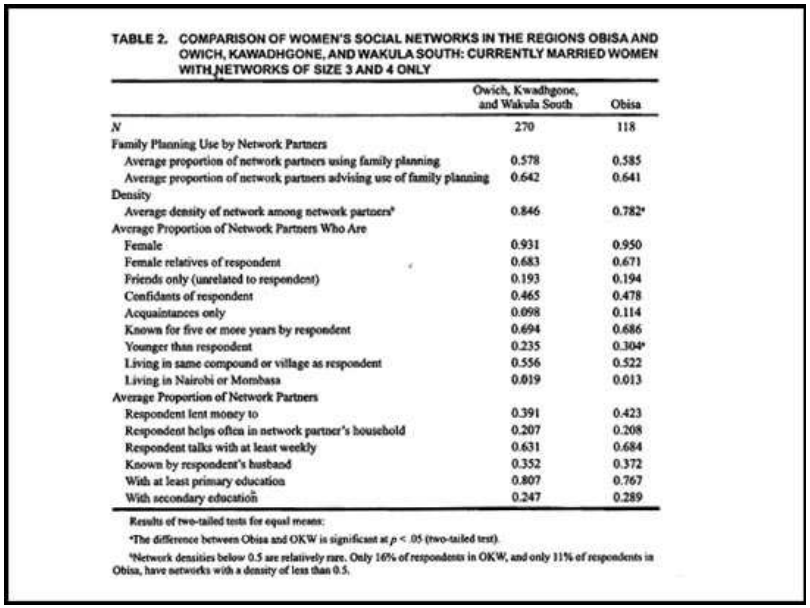


TABLE 2. COMPARISON OF WOMEN'S SOCIAL NETWORKS IN THE REGIONS OBISA AND OWICH, KAWADHGONE, AND WAKULA SOUTH: CURRENTLY MARRIED WOMEN WITH NETWORKS OF SIZE 3 AND 4 ONLY

	Owich, Kwadhgone, and Wakula South	Obisa
N	270	118
Family Planning Use by Network Partners		
Average proportion of network partners using family planning	0.578	0.585
Average proportion of network partners advising use of family planning	0.642	0.641
Density		
Average density of network among network partners[a]	0.846	0.782*
Average Proportion of Network Partners Who Are		
Female	0.931	0.950
Female relatives of respondent	0.683	0.671
Friends only (unrelated to respondent)	0.193	0.194
Confidants of respondent	0.465	0.478
Acquaintances only	0.098	0.114
Known for five or more years by respondent	0.694	0.686
Younger than respondent	0.235	0.304*
Living in same compound or village as respondent	0.556	0.522
Living in Nairobi or Mombasa	0.019	0.013
Average Proportion of Network Partners		
Respondent lent money to	0.391	0.423
Respondent helps often in network partner's household	0.207	0.208
Respondent talks with at least weekly	0.631	0.684
Known by respondent's husband	0.352	0.372
With at least primary education	0.807	0.767
With secondary education	0.247	0.289

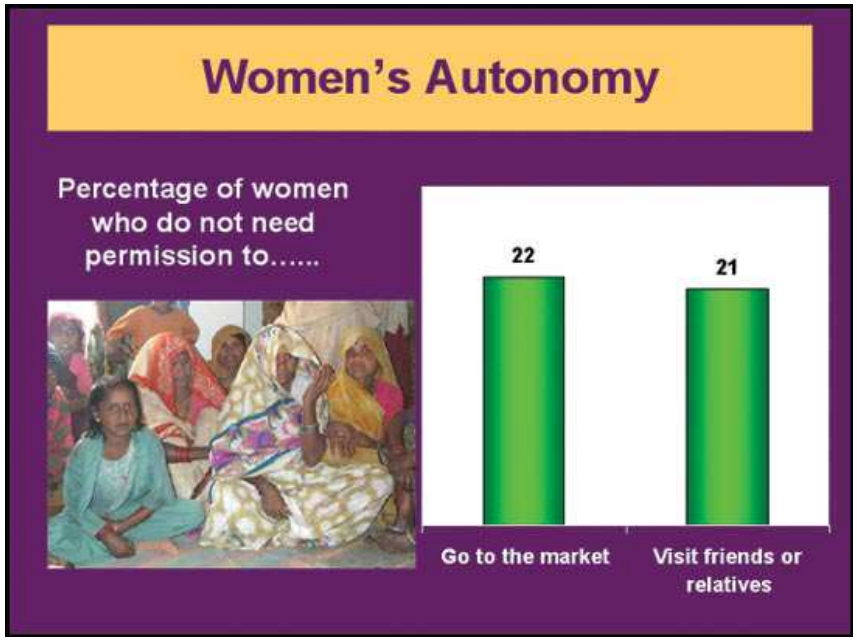
Results of two-tailed tests for equal means:

*The difference between Obisa and OKW is significant at $p < .05$ (two-tailed test).

[a]Network densities below 0.5 are relatively rare. Only 16% of respondents in OKW, and only 11% of respondents in Obisa, have networks with a density of less than 0.5.

Photos also help put a “human face” on the numbers.

✔ DO



✘ DON’T

Business Meeting

Golden and Platinum Rules for Conducting Effective Business Meeting

Golden: Treat others as you would like to be treated

Platinum: Treat others as they would like to be treated

Business Meeting

Have the participants been informed of:

- Date, place, time
- Agenda
- Objectives
- Specific preparations
- Documentation
- Specific roles

1. Opening the meeting
2. Introducing the agenda
3. Starting objectives
4. Calling on a speaker
5. Controlling the meeting
6. Moving the discussion on
7. Summarizing
8. Closing the meeting

10 Commandments of the Meeting

Always Know What Time It is

Not Forget the Reason for Meetings

Praise in Public, Criticize in Private

Organize Meetings of Normal Business Hours

Not Use Group Pressure to Logroll Conclusions

Business Meeting

Not Use Meetings to Destroy Others' Careers

Keep the Personal and the Corporate Distinct

Remember that the Best Model for Meetings Is Democracy, Not Monarchy

Prepare a Clear Agenda and Circulate It Beforehand

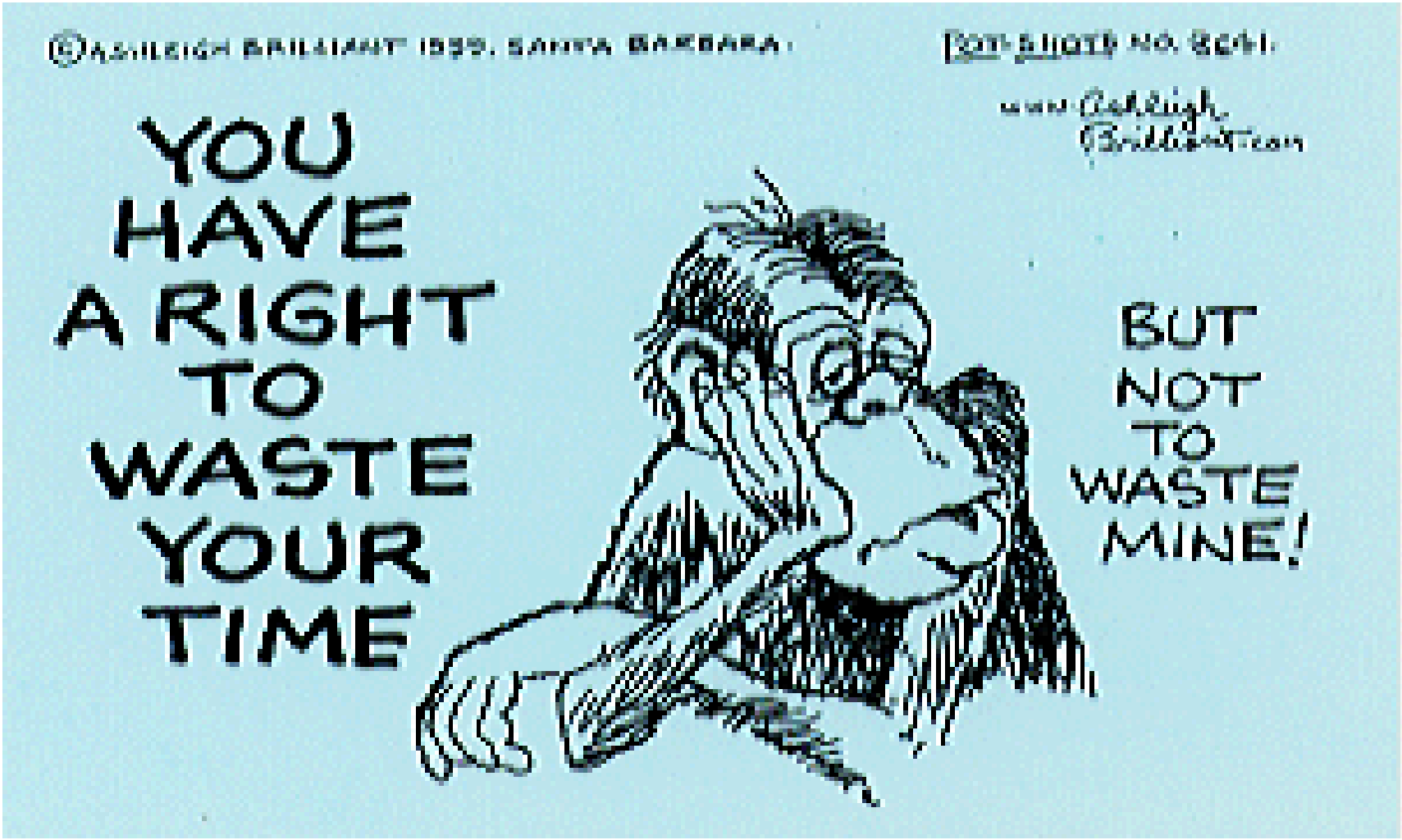
Terminate a Regularly Scheduled Meeting.

Agenda of Meeting

- State the problem properly
- Include all relevant detail in the announcement
- Including topic, date, time, placement
- Responsibilities of the participants

  Appearence
- Handshaking
- Presence (Dresscode)
- Grooming (hair, perfume, fingernails, jewelry, tattoos, shoes)

Business Meeting



First Impression

The rule of 12 in Business: You never get a second chance to make a first impression

- The first 12 words
- The first 12 steps

Business Meeting

Books are judged by their covers, houses are appraised by their curb appeal and people are evaluated on how they choose to dress and behave.

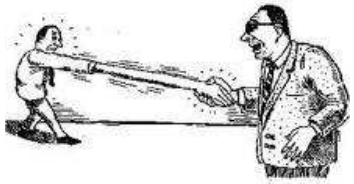
- Your Entrance and carriage
- Hold your head up
- Don‘t slump
- Project self confidence with
- a strong stride
- a friendly smile
- A good posture

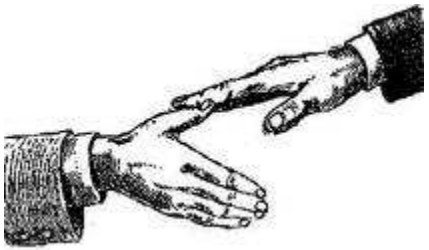
Business Meeting

- Prepare in advance
- Arrive early
- Position yourself
- Work the crowd
- Don‘t clump
- Know when to leave

Business Meeting

Hand Shakes





Business Meeting

and always…

S

M

I

L

E

Max Weber's Model of Transactional and Transformational Leaders

•Asks how a leader can "legitimately" give a command and have actions carried out?
•Classified claims to the "legitimacy" in the exercise of authority
•Identified three kinds of leader/follower relations – traditional, bureaucratic and charismatic
•Believe they occur in combination
•Argues that "there may be gradual transitions between these types."

Max Weber's three ideal types of leaders

Three Frames

1. Bureaúcratic Leader

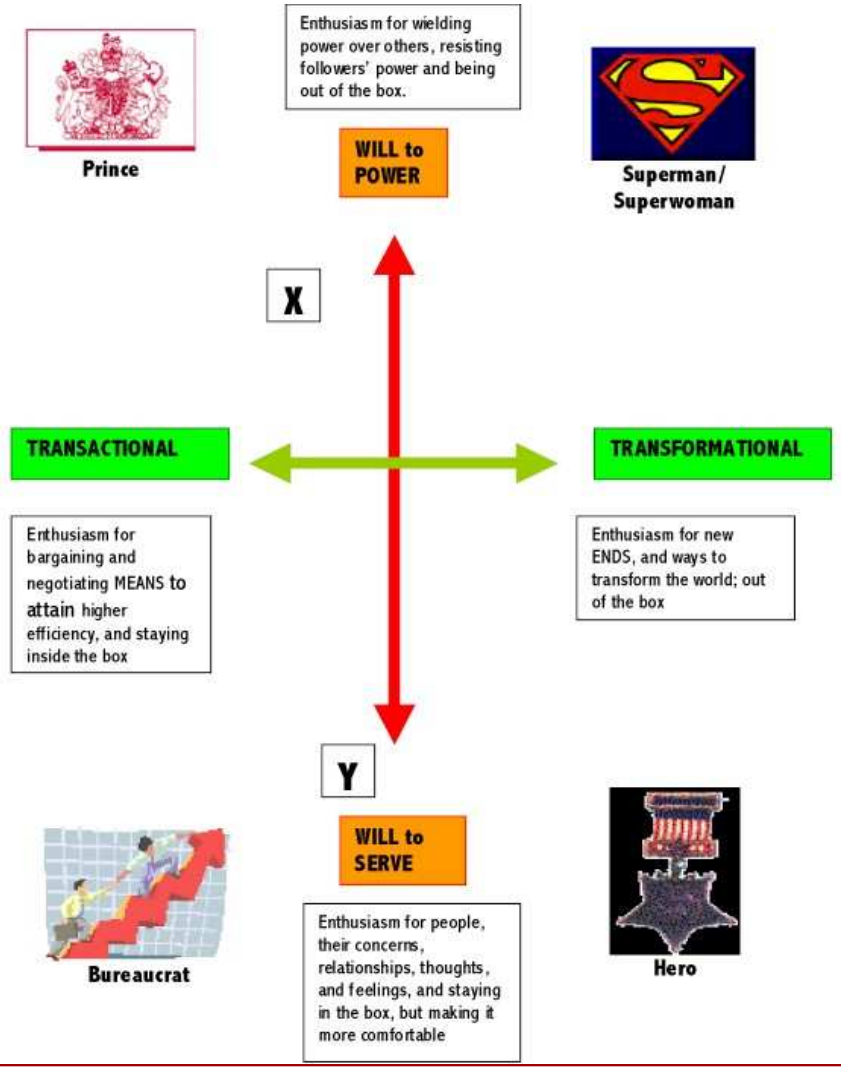
control on the basis of knowledge power

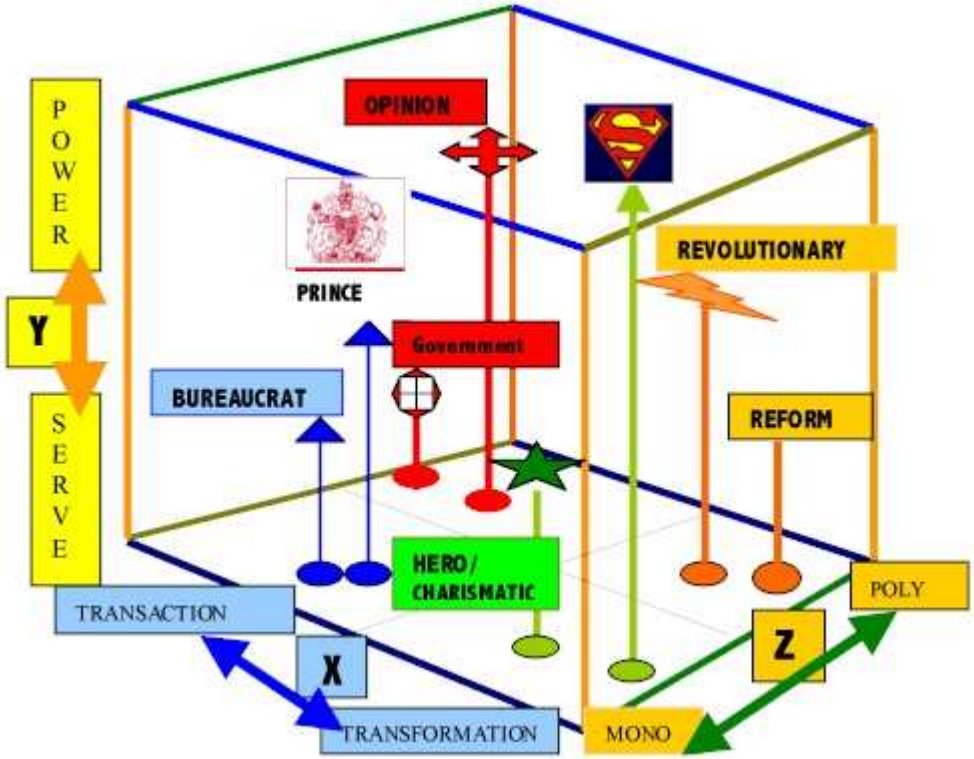
2. Charismatic Hero

An individual personality set apart from ordinary people. Part hero part superman

3. Traditional an arbitrary exercise of power bound to loyalty favoritism and politics

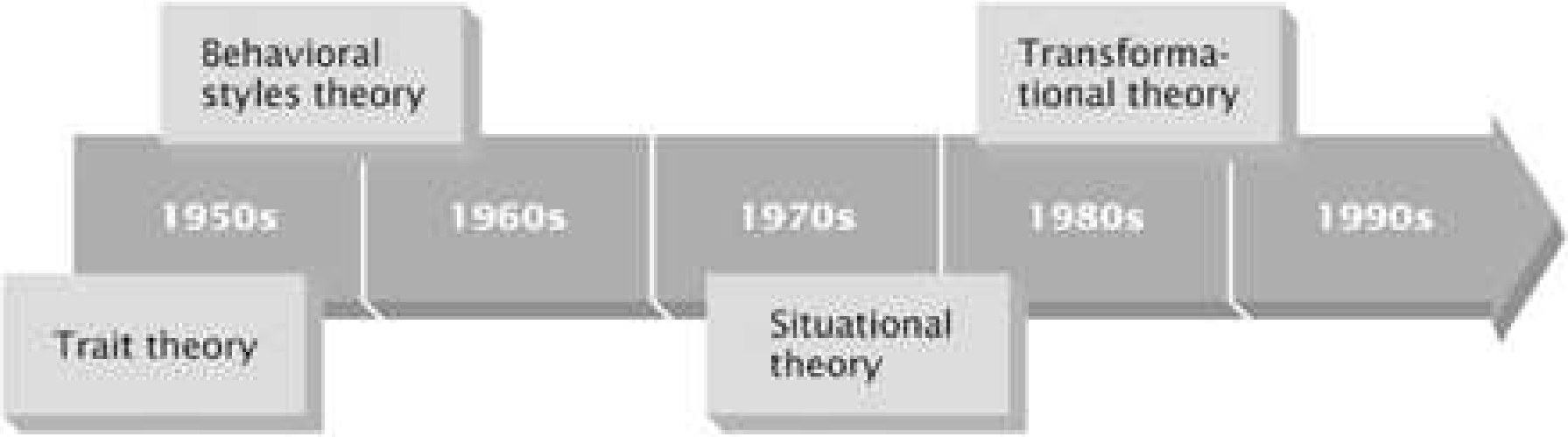
Transformational versus Transactional Leadership Theory




POWER
Y
SERVE
OPINION
PRINCE
Government
BUREAUCRAT
REVOLUTIONARY
REFORM
HERO/
CHARISMATIC
TRANSACTION
X
TRANSFORMATION
MONO
POLY
Z

- Long term strategic planning
- Clear objectives
- Leading by example
- Efficiency of systems and processes

To be effective in crisis conditions, the leaders must be transforming crises into challenges
B. Clinton


Behavioral styles theory
Transforma-tional theory
1950s
1960s
1970s
1980s
1990s
Trait theory
Situational theory

Transformational Leadership Goes Beyond Transactional Leadership

- Transactional Leadership
- Motivating for performance at expected levels
- Initiating structure to clarify roles and Tasks
- Stressing the link between reward and goal achievement.
- Uses agreed upon performance to motivate

Challenges

Leadership Theory Theory X and Theory Y

❖**Theory X:** **a composite of propositions and underlying beliefs that take a command-and-control view of management based on a negative view of human nature**

- **My employees dislike work and will try to avoid it if possible**
- **My employees want and need me to provide directio**
- **I am responsible for getting my employees to do as much work as possible**
- **Employees are basically lazy and self-centered**

Theory Y: a composite of propositions and beliefs that take a leadership and empowering view of management based on a positive view of human nature

- **Most employees like to work and achieve something**
- **I can count on my employees to be self-directed and work toward the company's goals**
- **My employees are eager to take on responsibilities at work**
- **Employees are not by nature passive or resistant to organizational needs**

- **“People want to win. And if people think they’ve been given the capability to win and are with winners, that’s how you get people in the game. People who want to build things and like who they work with will stay with us..”**

II. Soft Skills
2.1 Emergence of conflicts

Nature of conflict:

Conflict is a form of relationg or interacting where we find ourselves under some sort of threat to our personal or collective goals.

Sources of conflict:

- Biosocial
- Personality/interactional
- Structural/ideological
- convergence

What do we mean by conflict ?

Type 1:
„I want X and the opposite of X“ That‘s not possible, is it?

I want to live in the city

I want to live in the country

Emergence of conflicts

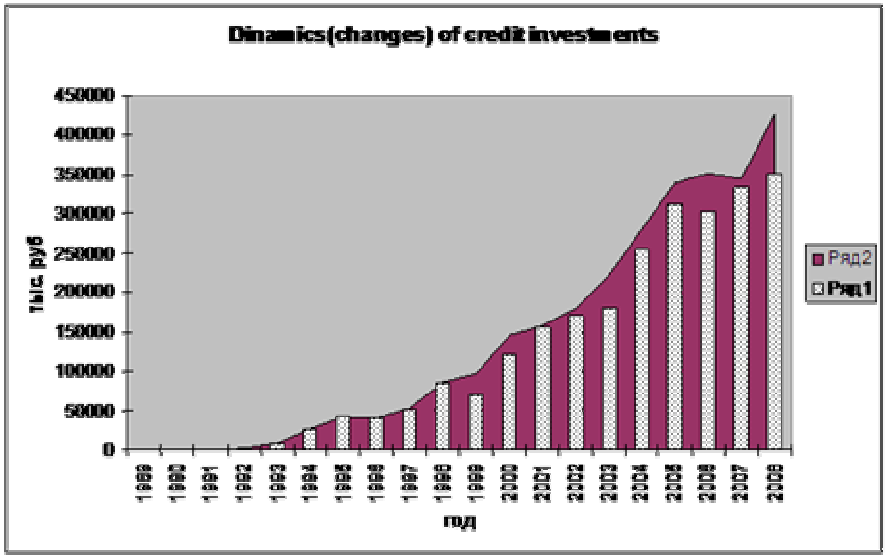
Type 2:
„I want X and Y“ But I have to choose, right?

„ want to eat what I want“

„…AND be fit and healthy“

Type 3:
„I want X.They want Y. We can‘t both be right“

Manager: „We need to go faster to deliver more features“

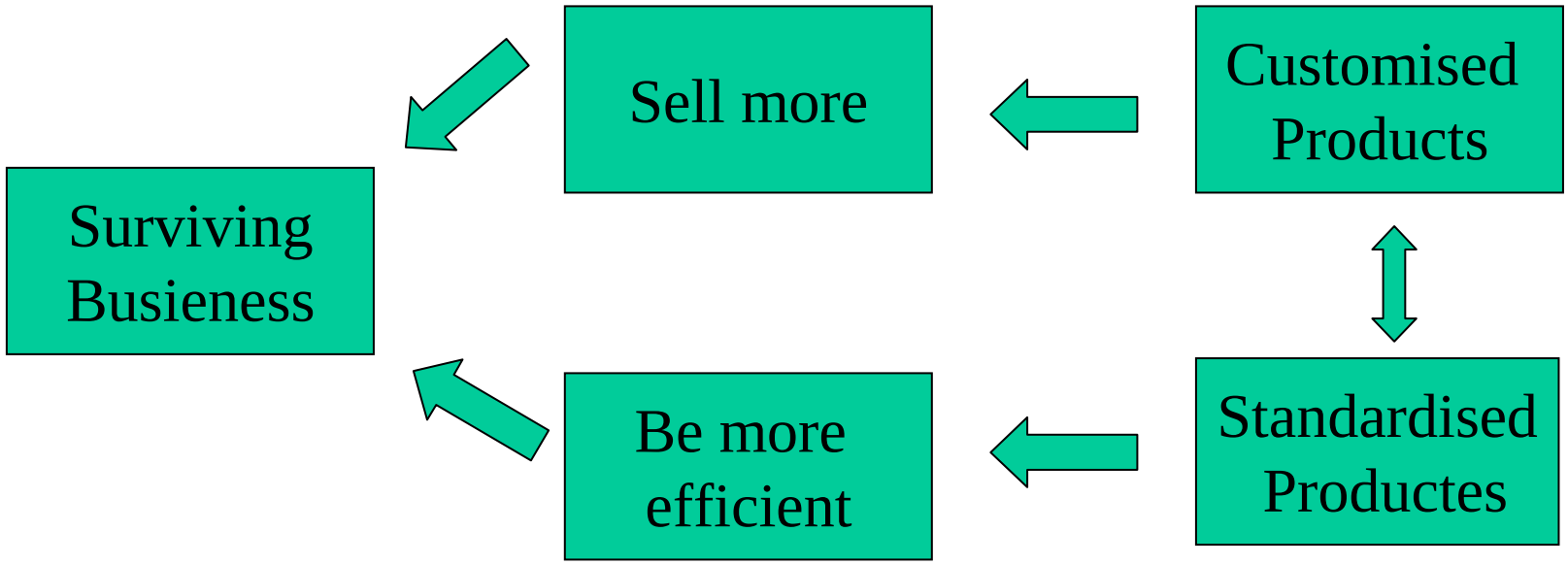


Developers: „We need to go slower to increase quality“

Nature of conflicts

Tip: Don‘t continue until you agree on a common, concrete and motivating goal

If there‘s no common goal, there‘ s no incentive to solve the conflict.



Emergence of conflicts

Tip: Strive for clarity first, then for correctness

Precise and crisp definitions to ensure everyone has the same understanding

Tip: Brainstorm assumption

X is the ONLY way to have Y

X is the BEST way to have Y

X guarantees Y

Emergence of conflicts

- You can‘t solve your own conflict

  ⇒ ASK FOR HELP

- The biggest obstacle is willingness to find a solution without compromise

  ⇒ Need to believe that a solution exists

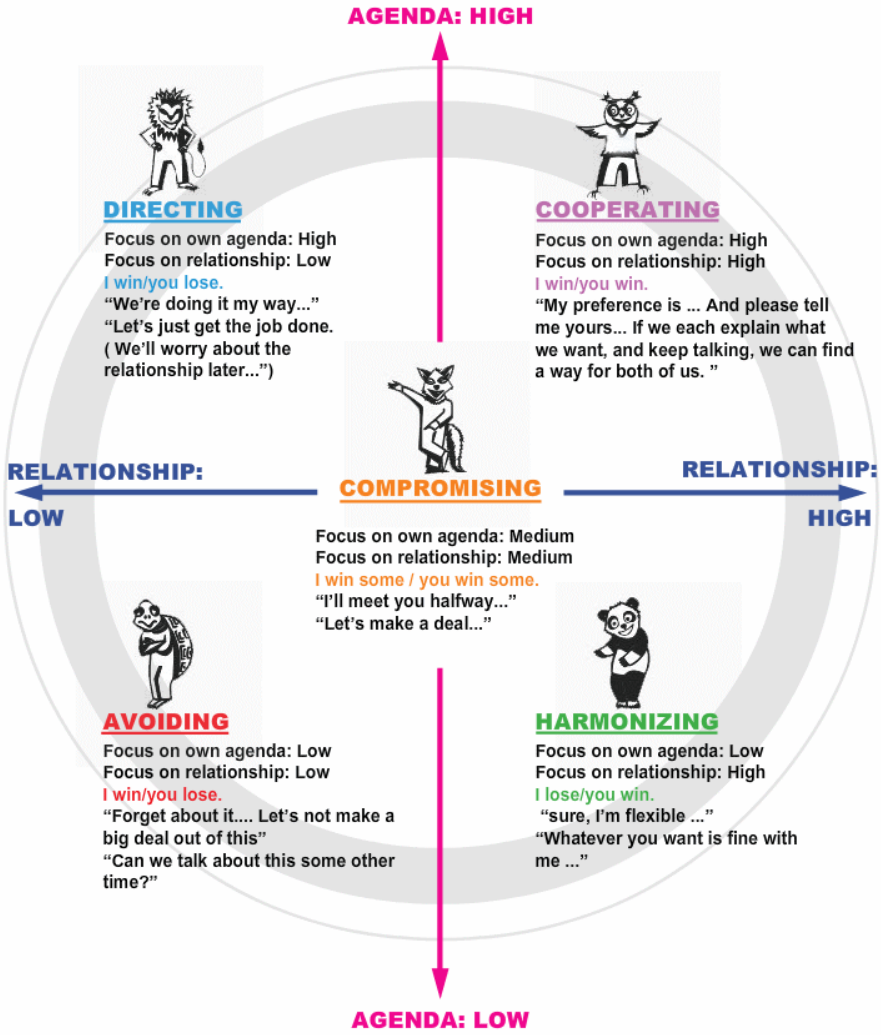
  ⇒ Use examples to show that solving a problem is possible

- Collaborative tool

  ⇒ Don‘t use it to prove the other party is wrong

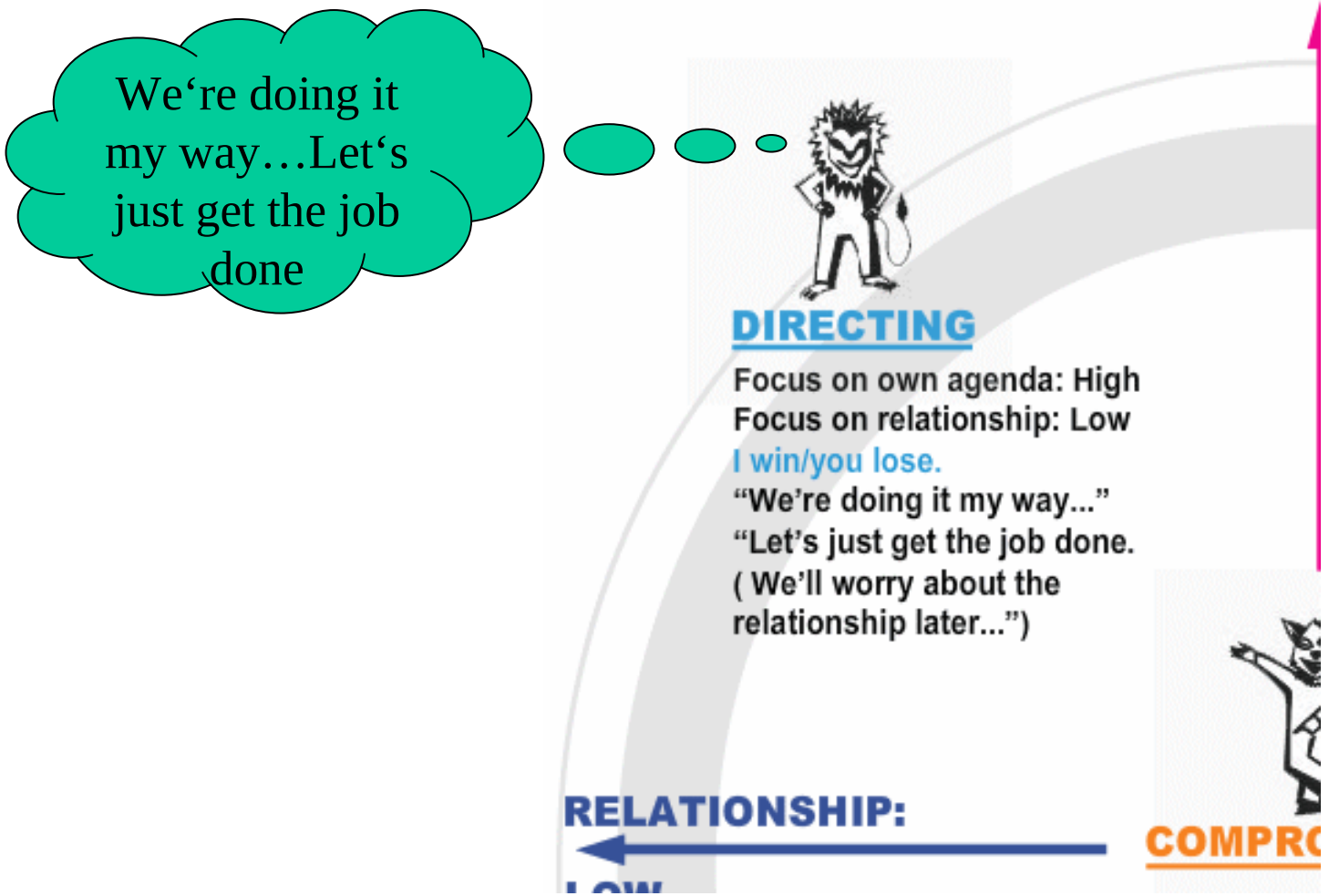
  ⇒ Sometimes you have to provide „Shuttle diplomacy.“

Conflict Progression



„When the only tool you have is a hammer, everything you see is a nail“
Mark Twain

Conflict Progression



Conflict Progression

RELATIONSHIP:

HIGH

dium
dium

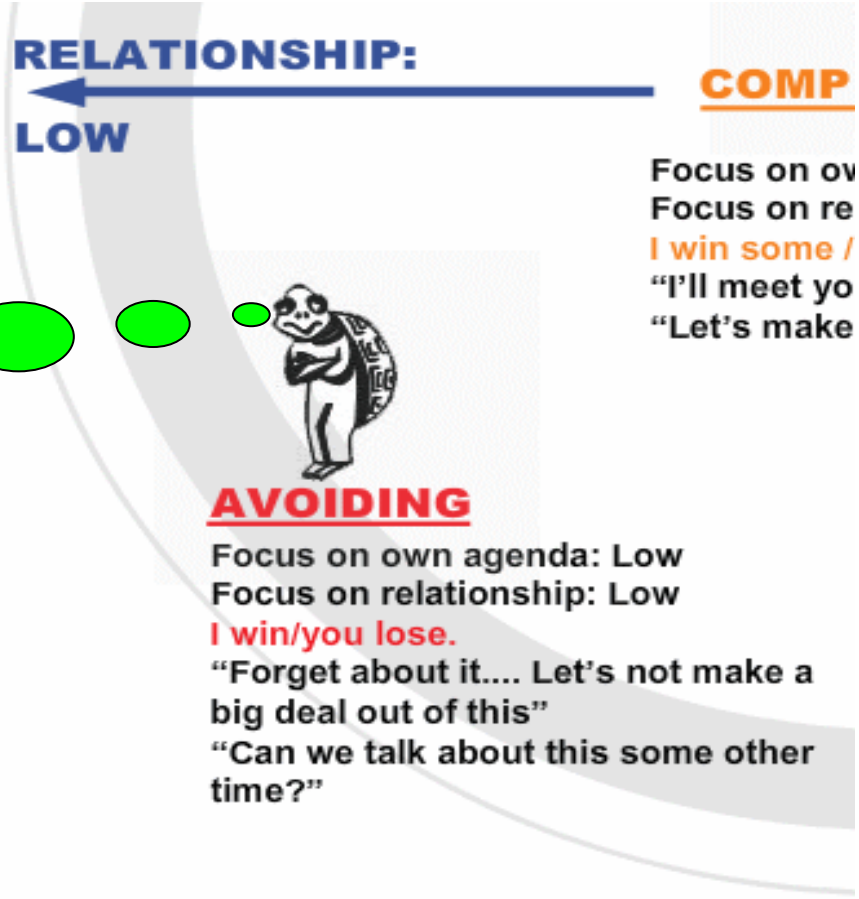
HARMONIZING

Focus on own agenda: Low
Focus on relationship: High
I lose/you win.
"sure, I'm flexible ..."
"Whatever you want is fine with me ..."

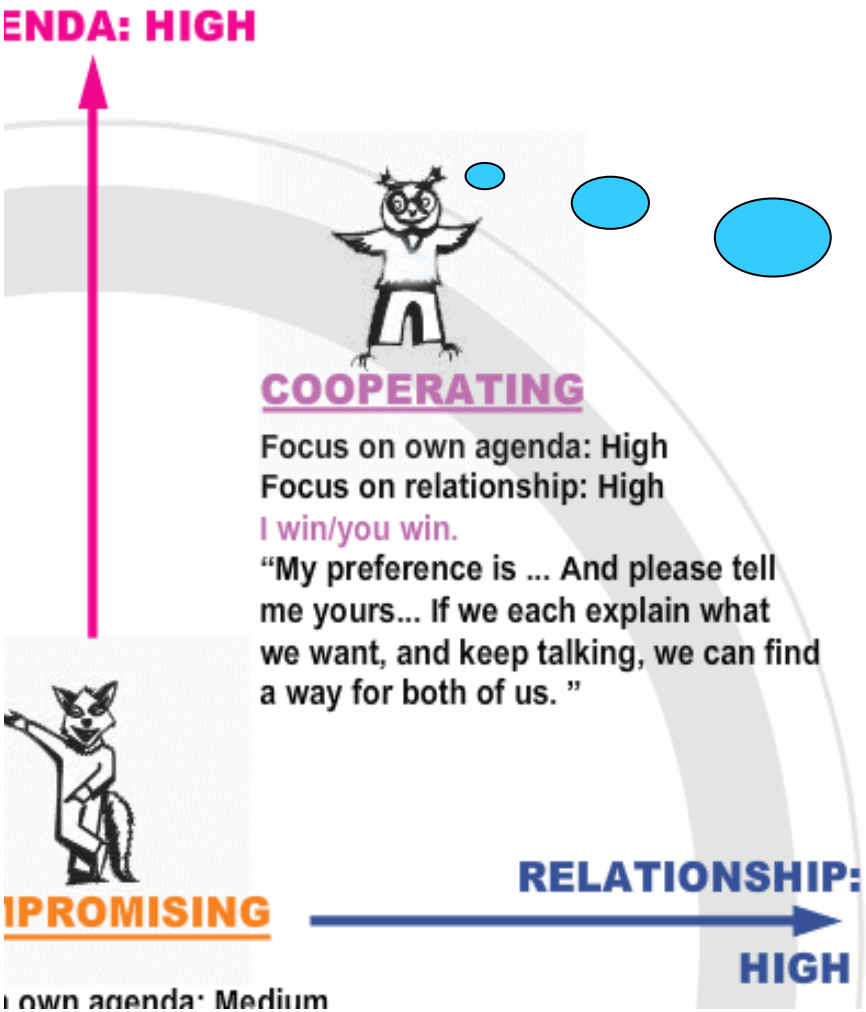
Sure, I am flexible. Whatever you are happy with is fine with me

Conflict Progression

Let me out of here…! I dan‘t want to talk about it…Conflict? What conflict?



Conflict Progression



Let's talk this through…My preference is…And I want to hear and understand yours…

Conflict Progression

Distruction of communication

Critical thinking

Groupthink :

is a tendency for strong conformity pressures within groups to lead to the breakdown of critical thinking and encourage premature acceptance of questionable decisions

Critical thinking

- Lack of conflict is a sign of over conformity
- It is unhealthy when there is no conflict
- You need diversity of opinion

Which conflict handling style will you use?

Avoiding Style

Characteristics:

- Ignoring conflicts, hoping they go away
- Putting problems under considerations
- Appeal to bureaucratic rules

When to us?

- Trivial issue
- No perceived chance of resolution
- To allow a cool down period
- To allow others to resolve the situation

Conflict Resolution

Compromise style Characteristics:

- **Negotiations**
- **Looking for deals and trade offs**
- **Finding satisfactory or acceptable solutions**

When to use

- **Opponents with equal power are committed to mutually exclusive goals**
- **Achieve temporary settlements**
- **Arrive at solutions under time pressure**

Competition Style

Characteristics:

- Create win-lose situations
- Use of power plays
- Forsing submission

When to use:

- Quick action is vital
- Cost cutting
- Against people who take advantage of non competitive behavior

Conflict Resolution

Accomondation Style Characteristics:

- Giving way
- Submission and fullfillment

When to use:

- Find you are wrong
- Issue more important to others than to yourself
- Maintain cooperation
- Build social credits for later on
- Minimaze loss
- Harmony and stability are important
- Allow team members to learn from their mistackes

Conflict Resolution

Collaboration Style

Characteristics:

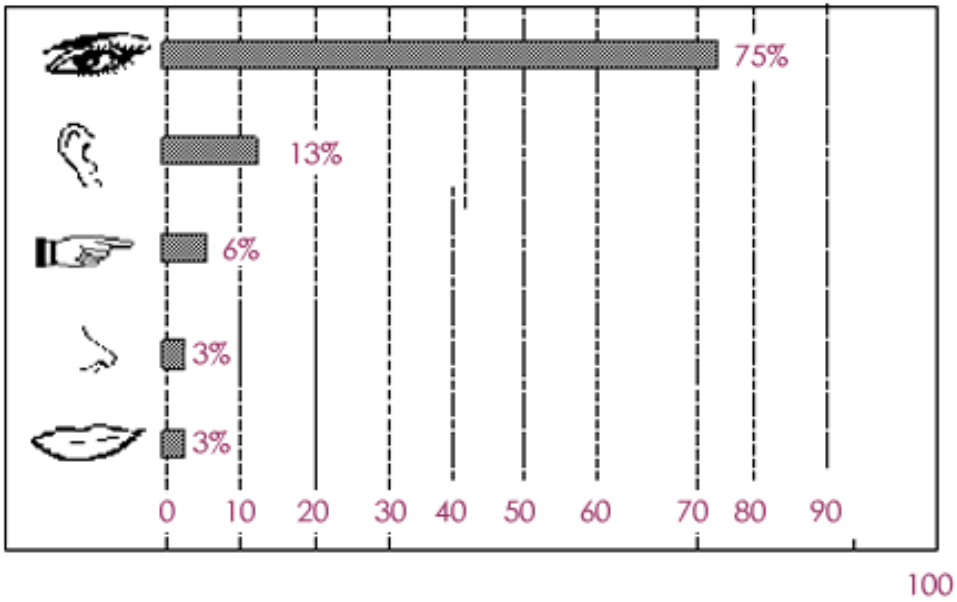
- Problem solving carriage
- Sharing ideas and information
- Seeing problems and conflicts as challenges

When to use:

- Find an integrative solution
- Objective is to learn

2 methods for Resolving Conflict in a Team

Role Clarification Technique (RAT)



This is a systematic procedure which involves all team members understanding the requirenments of their own position, duties and expectations.

You need to clarify roles for team and individuals (for ex. Via questionnaires) (RAM matrices)

Critical thinking

LISTEN

DISCUSS

PLAN

Critical thinking

Emotional Stress

What is Stress?

A pattern of emotional states and physiological reactions occuring in situations where individuals perceive threats to their important goals that they feel unable to meet

Critical thinking

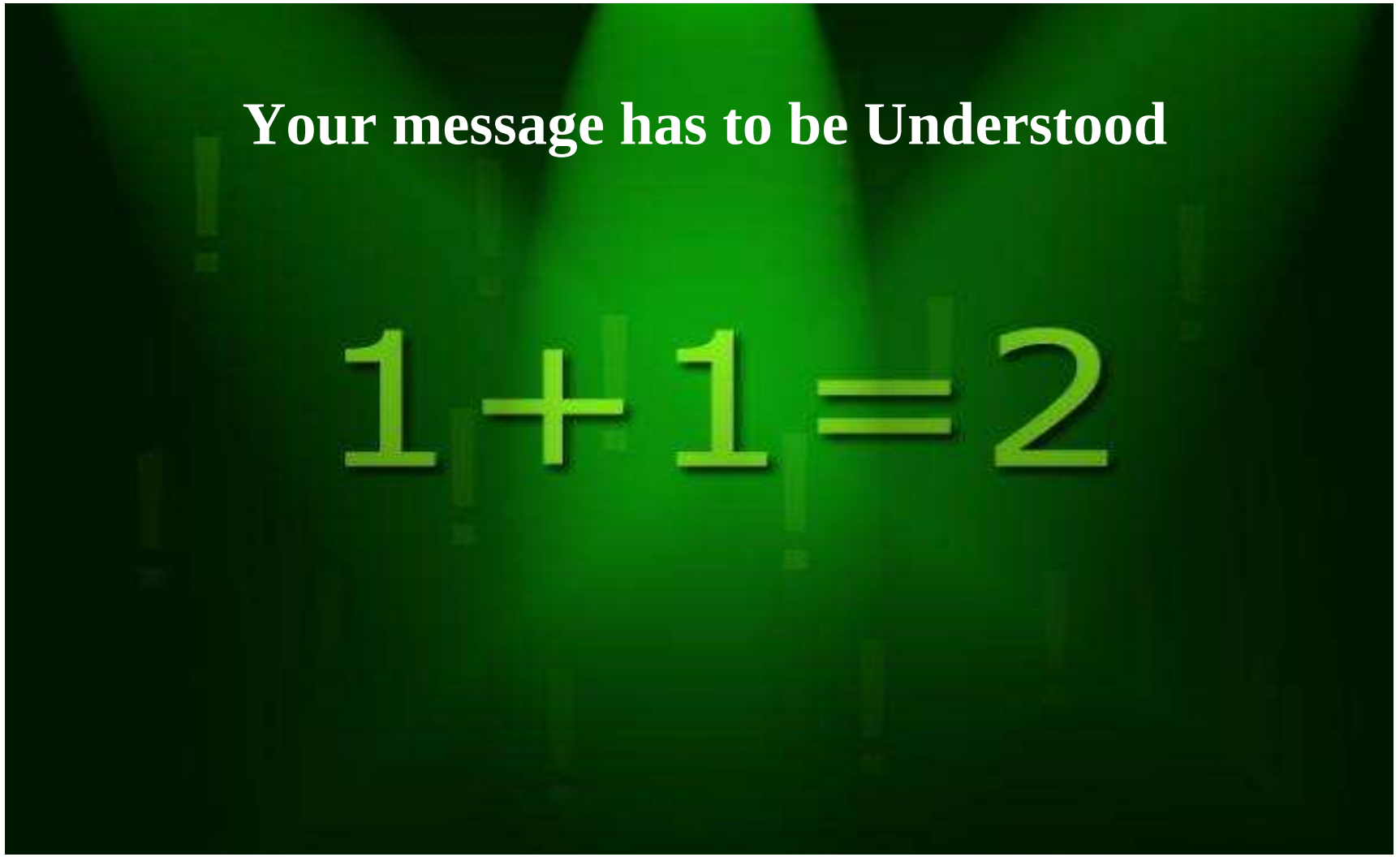
Effects of stress

- Physical Ilness
- Lack of sleep
- Reduction in task performance
- Poor quality decision making

Stress Management at the Organizational Level

- Setting reasonable work plans and scheduler
- Delegating responsibilities and increasing independence
- Clarifying responsibilities, authority and performance criteria
- Giving consideration and support in leadership

Communicating with Groups (Platform Skills)

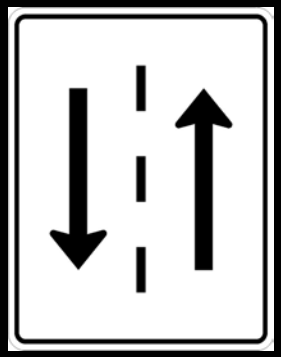

Your message has to be Understood
1+1=2

STEP 1

LISTEN
DON‘T
HEAR

Platform Skills

Active listening is important for two way communication



DON‘T ASSUME

Platform Skills

Replay what you heard

Active listening demand 100% attention

Active listening will send the right signals

Platform Skills

Step 2

Build Rapport/ Analyze

Understand their map of the world

Platform Skills

Step 3

Choose words carefully

Send your message

Remember their map

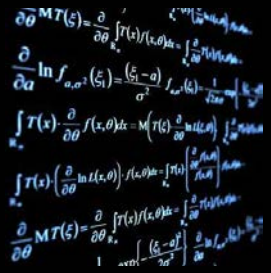
Use their lanuage

Say only what you need to say

Platform Skills

Check understanding

Avoid technical language



Avoid Ambiguity

Platform Skills

- A man is seldom better than his conservation

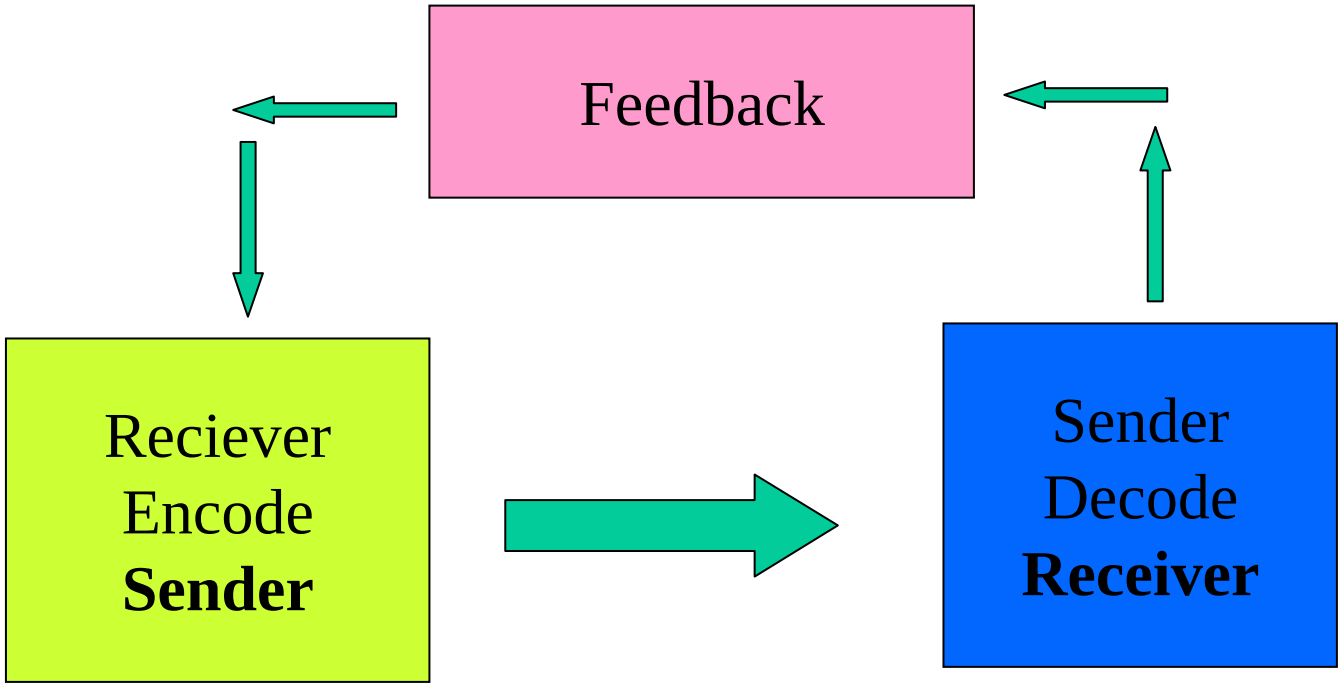
  German Proverb

- Effective communication skills are a critical element in your career and personal lives

- We all must use a variety of communication techniques to both understand and be understood

Platform Skills

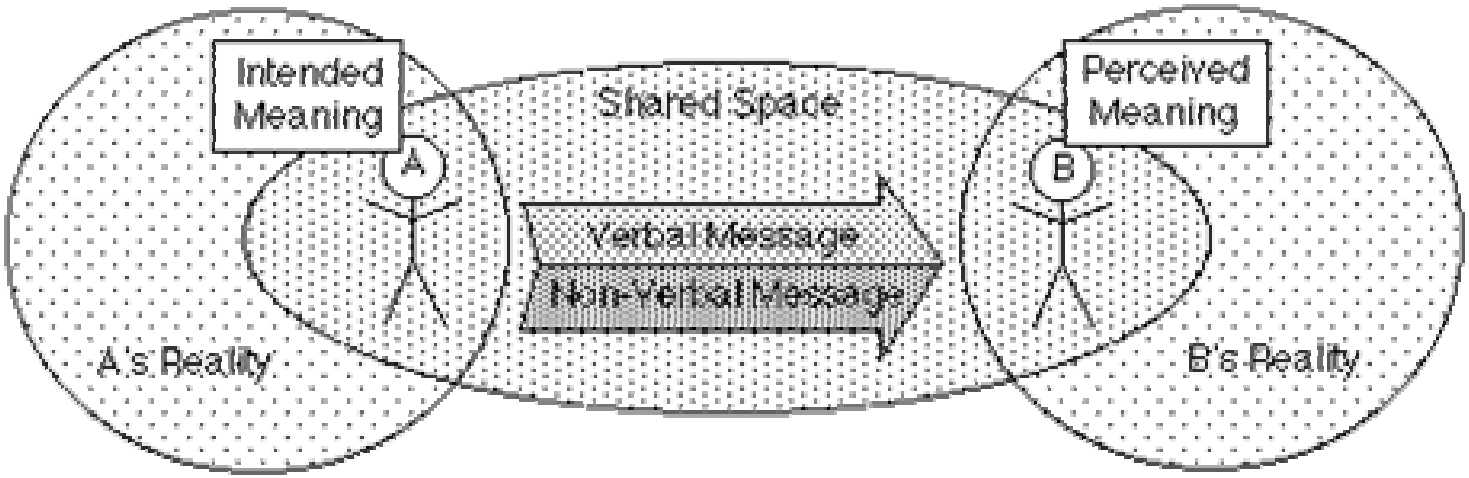
Communication is the process of sending and receiving information among people….



Platform Skills

Common communication errors:

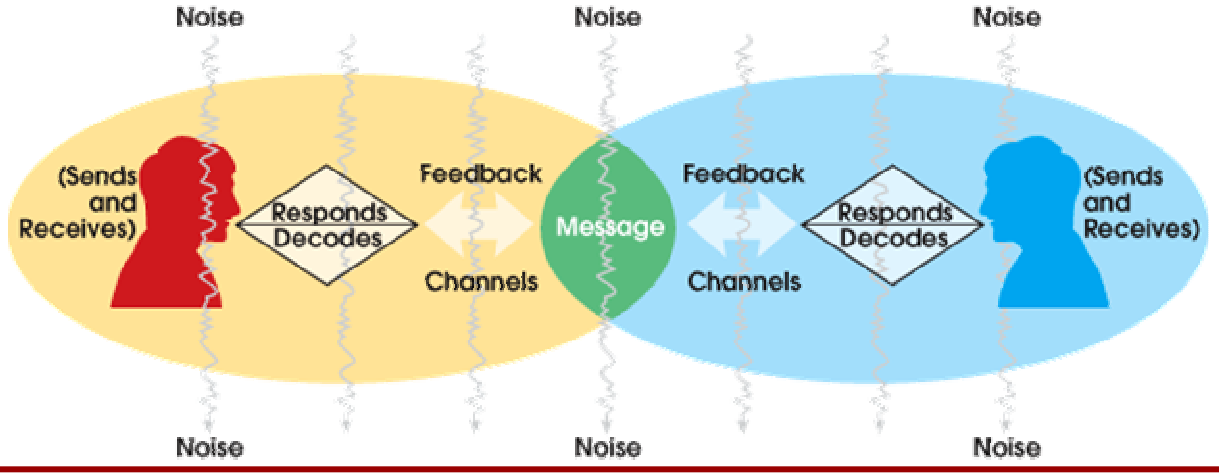
- Finishing others‘ sentences
- Preparing response before someone has completed speaking
- Multitasking while listening
- Speaking for others (We…)



Platform Skills

A good Algorithm: Communication is a two way process!

- **Listen to understand**
- **Understand before speaking**
- **Speak to be understood**
- **Seek understanding before proceeding**
- **REPEAT!**



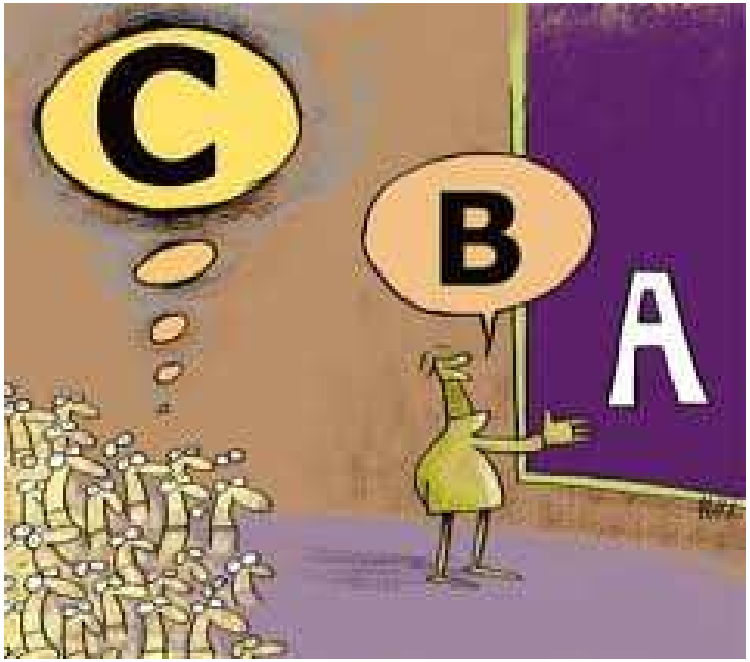
He who fails to prepare, prepares to fail!

Public speaking

What does the graphic tell you about this speaker?

1. Overcoming Fear
2. Idea of Speech
3. Know the audience
4. Organize the speech

Public speaking



Presentation skills techniques

"Oh. Just one more thing."

Public speaking

The Differences Between a Man and a Woman in the Audience that is …

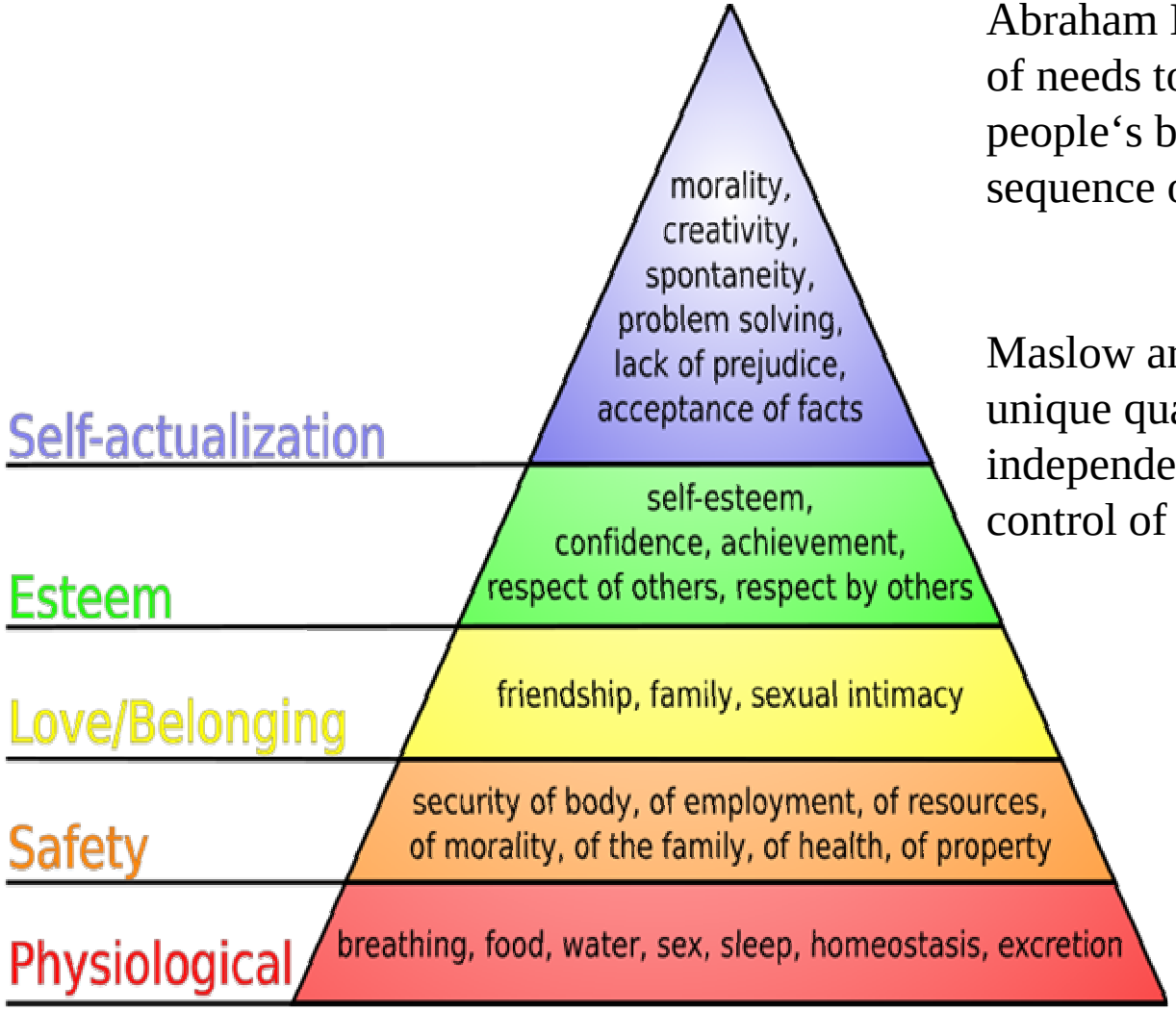
- Laugh more easily and louder than all male audiences.
- All-male audiences are the toughest because the male ego gets in the way of laughter.
- Males are sensitive as female

Teamwork

Common Characteristics of High Performing Teams

- Goals are clearly defined and matched with measurable outcomes
- Leadership is shared and participation encouraged
- Diverse backrounds and experience

Motivation theorists: Maslow‘s hierarch of needs



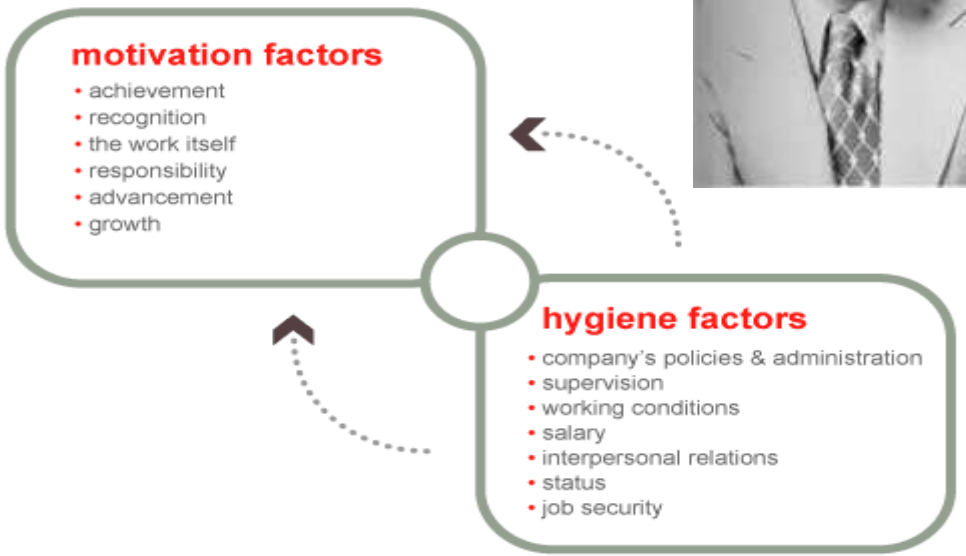
Abraham Maslow developed a hierarchy of needs to illustrate his theory that people‘s behaviors are guided by a sequence of needs.

Maslow argued that humans possess unique qualities that enable them to make independent choices, thus giving them control of their destiny

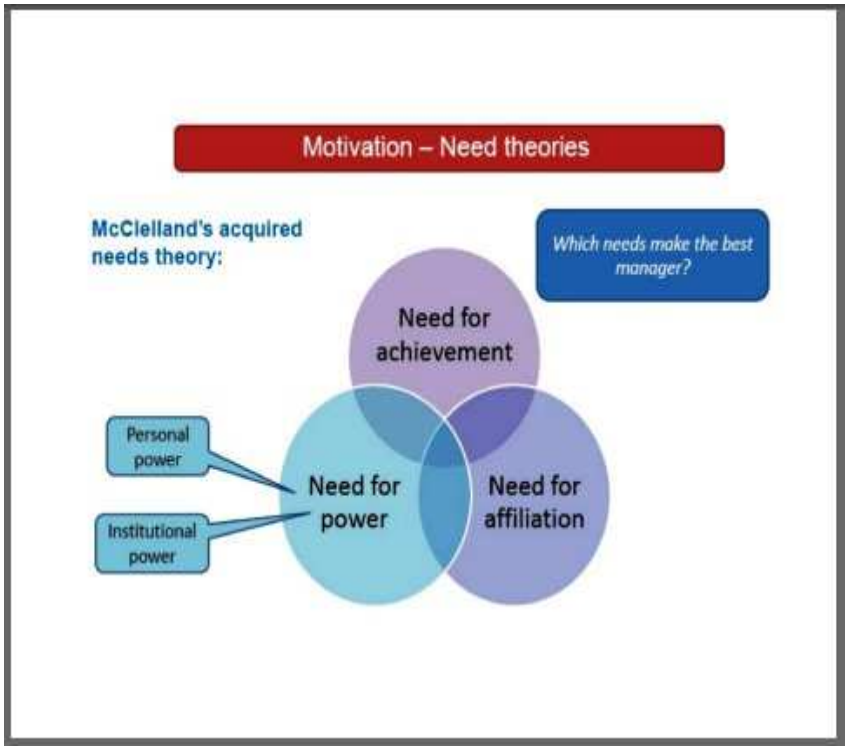
Hertzberg‘s Motivation Hygiene Theory

In the late 1960s F. Herzberg wrote about worker motivation.

He distinguished betwe motivation factors and hygiene factors



McClelland‘s Acquired – Needs Theory



Acquired Needs Theory describes three types of motivational needs: Achievement, Authority and Affiliation.

David McClelland was a pioneer in the field of workplace motivational thinking, and was a proponent of competency-based assessments in favour of IQ and personality based tests.

David Mcclelland suggested that a a manager's objectivity is underminded by a strong AAA because of the desire interferes with the decision-making capability of a manager.

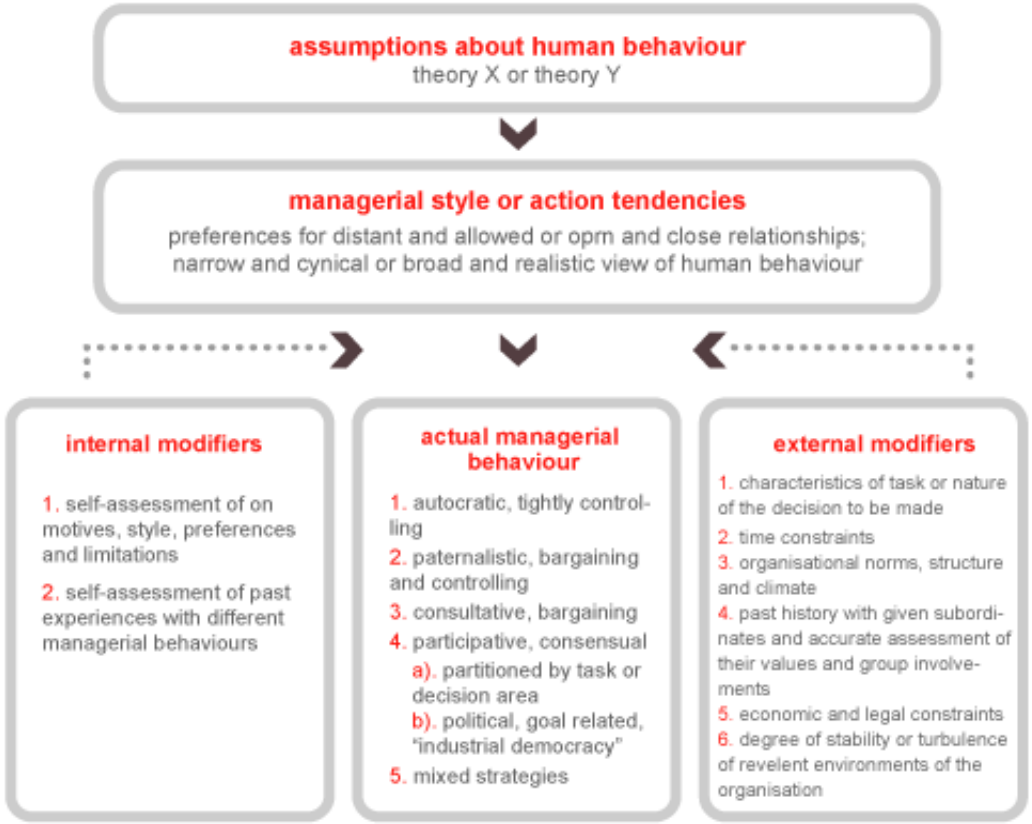
McGregor‘s Theory X and Theory Y

In the 1960s Douglas McGregor popularized the human relations approach.

Theory X: workers dislike and avoid work

Theory Y: work is a natural as play or rest

Theory Z: emphasizing trust, quality, collective decision making



Project Management

Project Planning

Project Planning

Content:

- What is a project break down structure?
- The principles of project scheduling
- Critical path analysis
- Calculationg project times
- Assigning resources

Project Planning

For detailed activity planning, you have to

Break down

the

work!!!!!

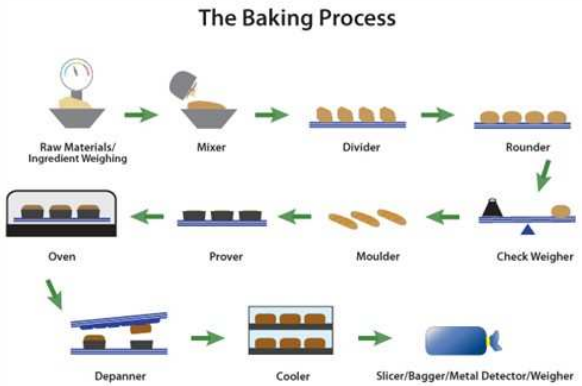
Project Planning

The project

The project stages (milestones)

The tasks to reach a milestone (work packages)

TOP DOWN



Ingredients

1+1/3 cup (150 g) all-purpose flour
1+½ cup (330 g) sugar
4 tablespoons unsweetened cocoa powder
1 teaspoon baking powder
¾ cup (170 g) butter
3 fl oz (0.9 dl) boiling water
3 eggs
4 oz (120 g) chocolate chips (40-50% cocoa)
5 oz (150 g) chopped walnuts or pecan nuts

Method

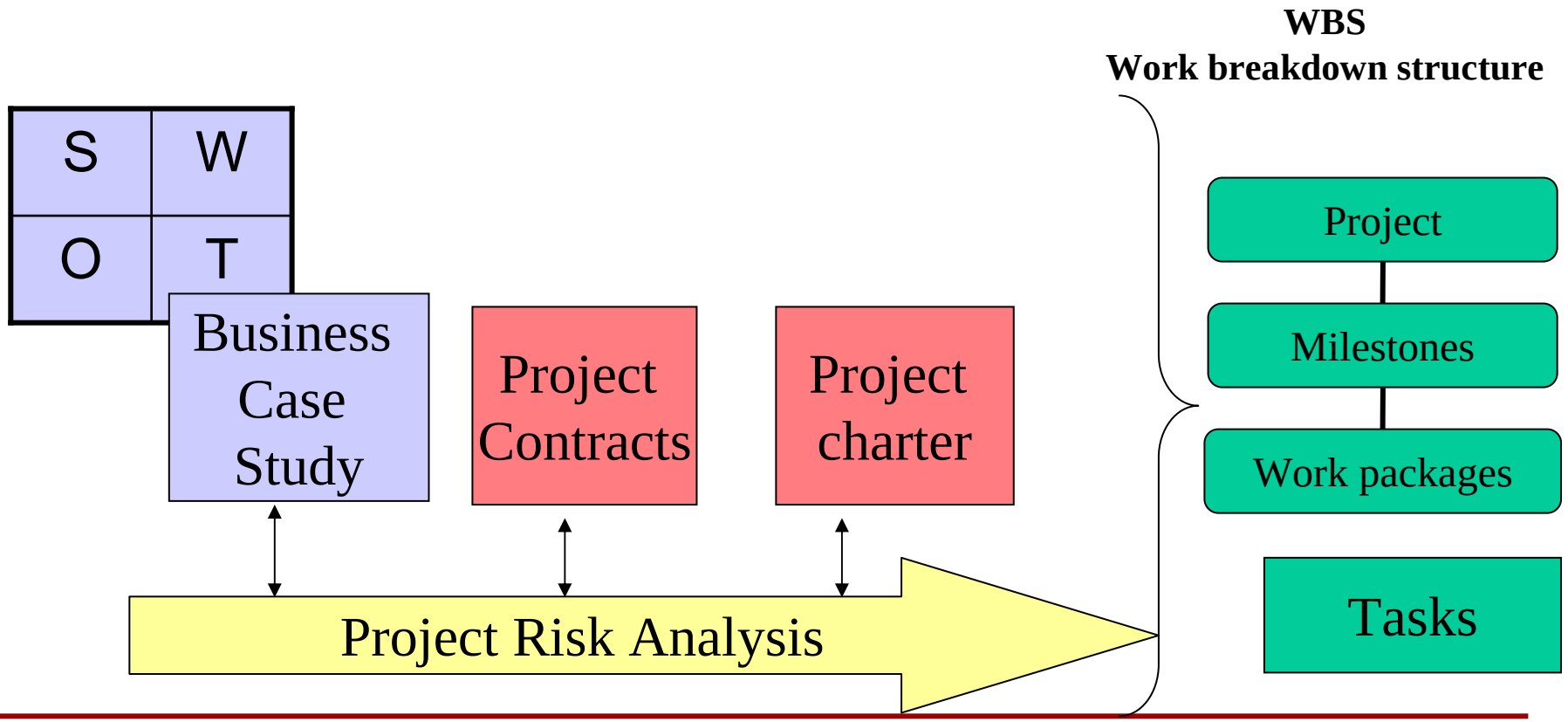
Preheat oven to 350 deg F (Gas mark 4 or 180 deg C).
Line a 13 x 9 in (33 x 23 cm) cake tin with grease proof or other non-stick paper and grease the tin. Melt the butter in a saucepan. In a bowl combine flour, sugar, cocoa powder, baking powder and vanilla extract. Add eggs, melted butter and hot water and mix until smooth. Add chocolate chips and nuts. Bake at 350 degrees F until a wooden pick inserted in center comes out clean, approximately 20-30 minutes.

Variations

For these brownies you may instead use frosting with cocoa powderYou may add 1 tablespoon of espresso mix to brownie batter and use only semi-sweet ghiradelli chocolate chips and baking chocolate for the best result.

Project Planning

For creating a work breakdown structure we start with our results from scoping, contracting and risk management



Project Planning

There are 2 main approaches of defining a Milestones:

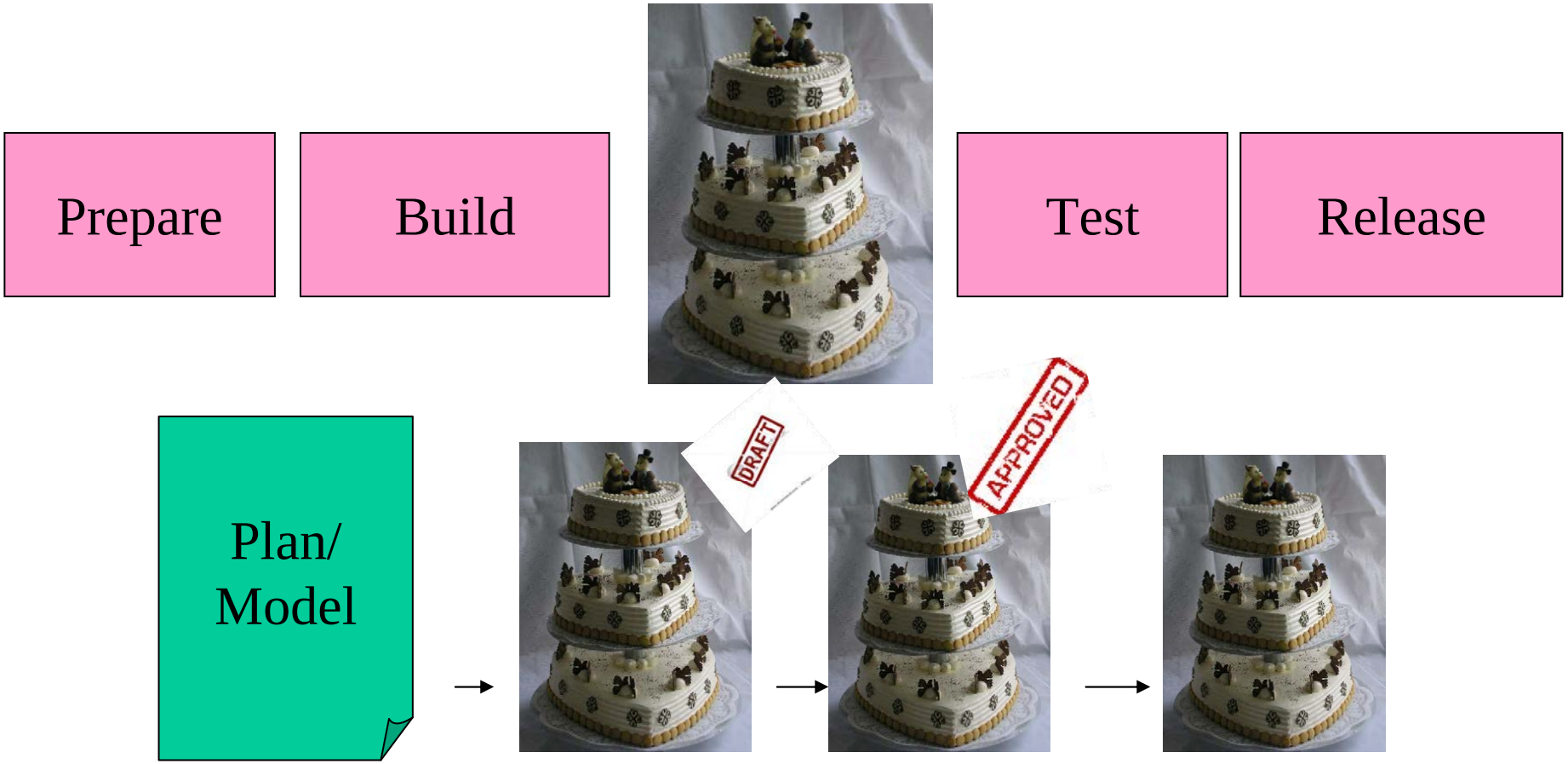
- The object oriented approach : Focusing the core **components** of your project.

The flan base	The cream filling	The chocolates	The icing	The final cake

Project Planning

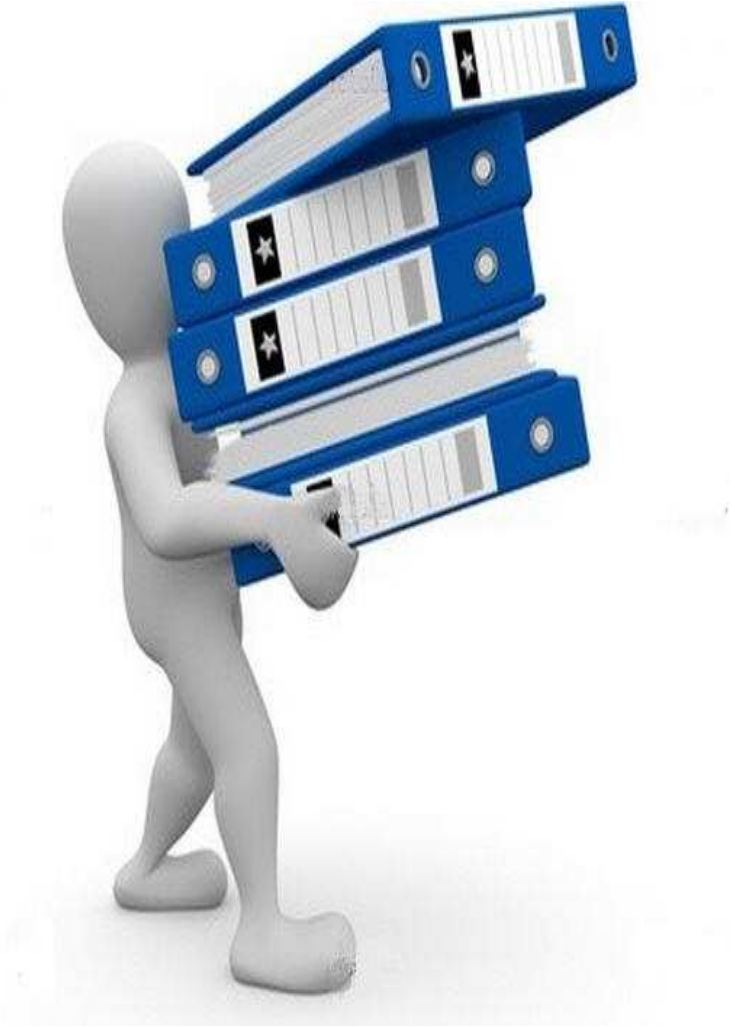
There are 2 main approaches of defining a Milestones:

- The object oriented approach : Focusing the core **phases** of your project.



What is a workpackage

- A workpackage is a bundle of detailed tasks
- In contrast to milestones, work packages are time consuming
- A work package must be executed in order to reach a certain milestone
- For reaching one particular milestone multiple work packages could be defined
- One particular work package can serve more than one milestone



Project Planning

There are 2 main approaches of defining a Milestones:

- The object oriented approach : Focusing the core **components** of your project.

Prepare	The flan base	The cream filling	The chocolate	The icing	Release
Analyze case	Build	Build	Build	Build	**Work packages**
Produce Plane	Test	Test	Test	Test	

The glue in management is called coordination

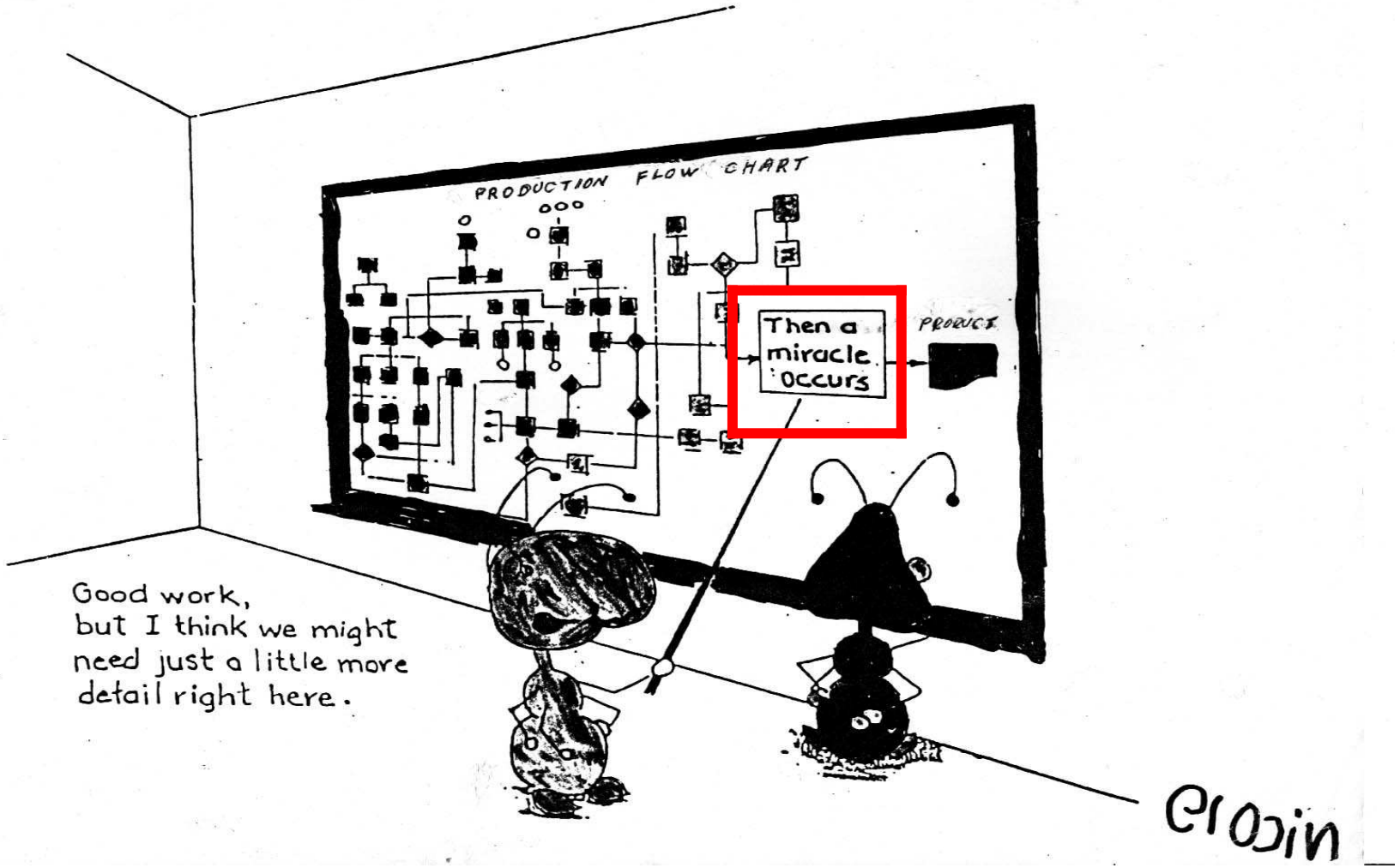
Whenever we split a thing in parts we need some glue instruction to bringing it together

- Whenever we distribute work and delegate tasks we produce a need for coordination!
- If original task = 100% -distributed task – 100% (with x% extra effort for coordination involved)
- Coordination keeps the bird‘s eye perspective (supervision), solves conflicts and guerantees a joint result
- A project schedule (plan) is an instrument for coordinating the project

…and how to translate it into a tabular WBS

1. Concept
   - 1.1 Evaluate current system
   - 1.2 Define requirenments
     - 1.2.1 Define user requirements
     - 1.2.2 Define content requirements
     - 1.2.3 Define system requirenments
     - 1.2.4 Define server owner requirements
   - 1.3 Define specific functionality
   - 1.4 Define risks and risk management approach
   - 1.5 Develop project plan
   - 1.6 Brief Web development team
2. Web Site Design
3. Roll Out
4. Support

Project Planning



Project Planning

After we know the WBS:

Let‘s create the Schedule!!!!!

Performance management

„The way to project success is never clean and easy. Wrong explanations based on a lack of understanding and unrealistic estimates are the most important reasons for project failure!“

Performance management

When adding resources won‘t enhance productivity:

100 guys might be able to dig

100 times faster than one guy…BUT

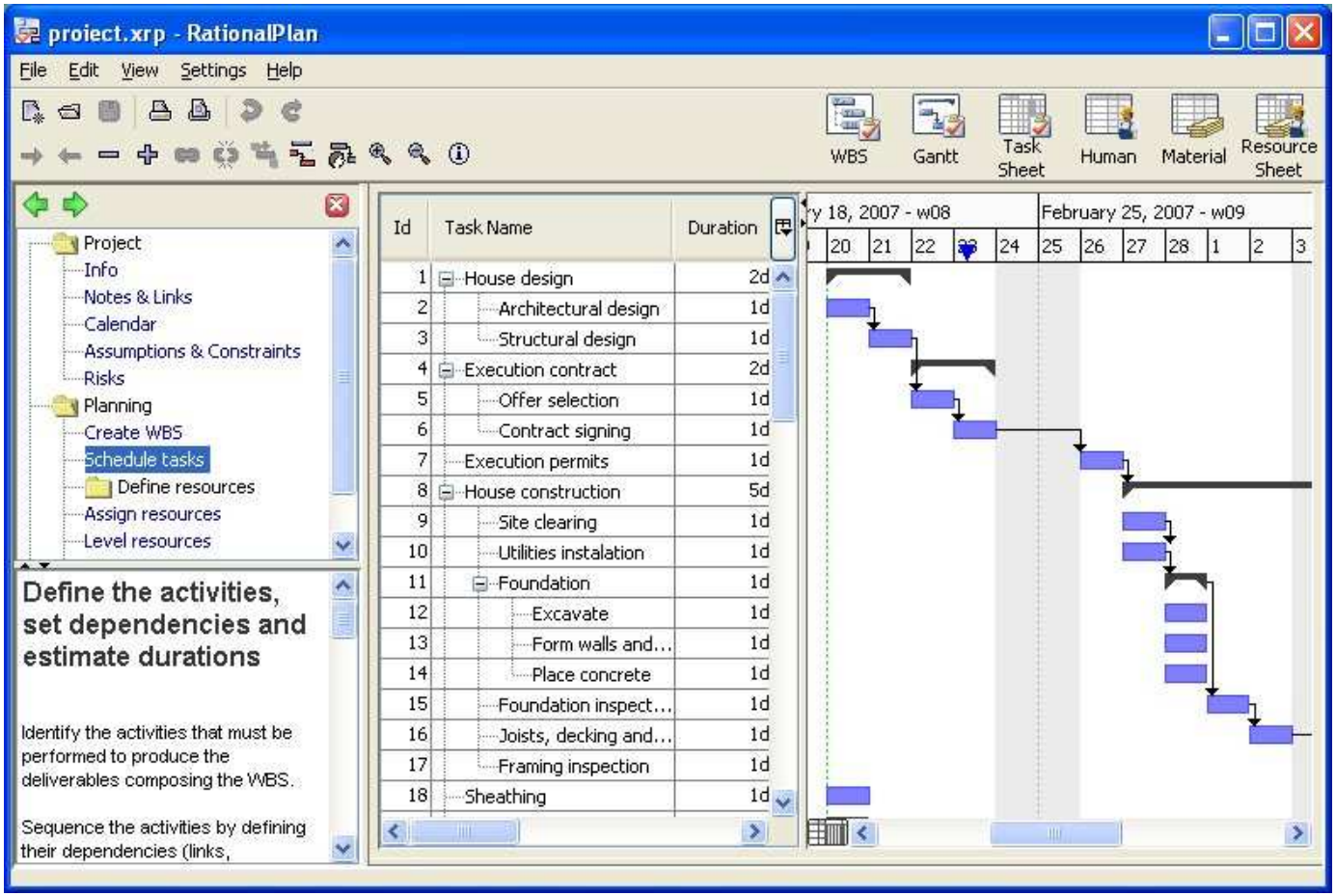
Performenca management

The bearing of a child takes nine months, no matter how many women are assigned

It is in the nature of some tasks that they cannot be speeded up!

- Tasks which are highly individual (either physically or intellectually)
- Tasks which are inevitably sequential, which need predecessors results

Finally, use professional software to draw your plan!



Project Planning

But always keep in mind that a plan is a plan is a plan…..

And life is a big surprise

Project Monitoring and Controlling

Project Monitoring and Controlling

Management is a process of achieving organizational goals through engaging in the four major functions of :

Project Monitoring and Controlling

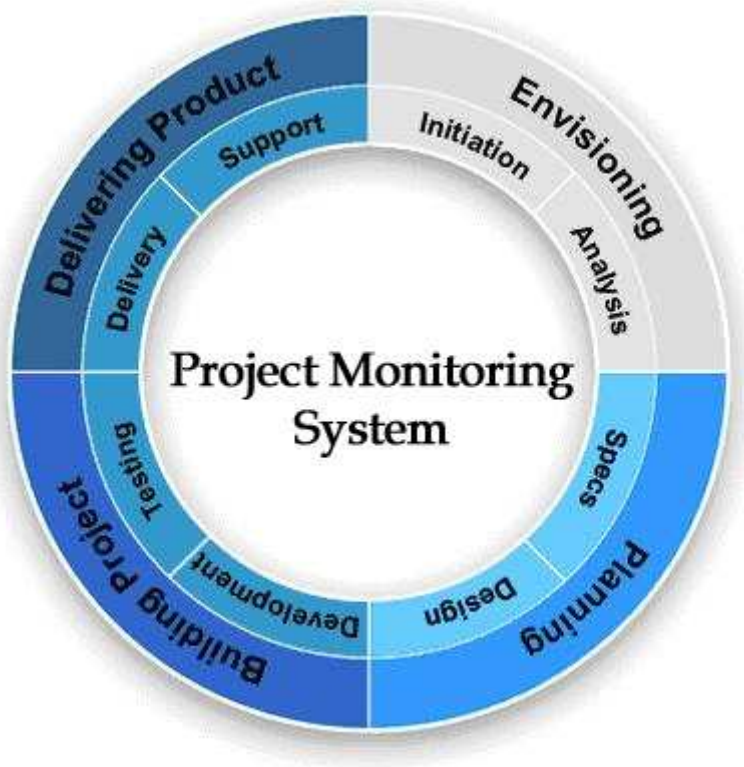
- List several tasks and outputs of
  - project monitoring and controlling,
  - and describe outputs common to all knowledge areas.
- Discuss performing integration change control
  - as part of project integration management
  - and how to use earned value management.
- Explain the importance of
  - scope verification, scope control, and accepting deliverables.
- Describe the schedule control process and schedule performance measurement tools,
  - such as tracking Gantt charts.
- Discuss tools and techniques
  - to assist in cost control.

Project Monitoring and Controlling

- Main tasks include:
  - Monitoring and controlling project work,
    - which involves
      - collecting, measuring, and disseminating performance information
        - » as well as assessing measurements
      - and analyzing trends
        - » to determine what process improvements can be made.
  - Performing integrated change control,
    - which involves identifying, evaluating, and managing changes
      - throughout the project's life cycle.

Project Monitoring and Controlling

- **Earned value management (EVM)**
  - is a project performance measurement technique
    - that integrates scope, time, and cost data.
  - Given a baseline, project managers and their teams can determine
    - how well the project is meeting scope, time, and cost goals
      - by entering actual information
      - and then comparing it to the baseline.
    - The baseline information includes:
      - Scope data (WBS tasks)
      - Time data (start and finish estimates for each task)
      - Cost data (cost estimates for each task)
- Note that you can use earned value management
  - at either a detailed or a summary level.



Monitoring and Controlling Tasks for Project Time Management

- The main monitoring and controlling task performed as part of project time management
  - is **schedule control**.
    - delivering projects on time
- Project managers often cite delivering projects on time as one of their biggest challenges,
  - because schedule problems often cause more conflict than other issues.
- During project initiation, priorities and procedures are often most important,
  - but as the project proceeds, especially during the middle and latter stages of the project,
    - schedule issues become the predominant source of conflict.

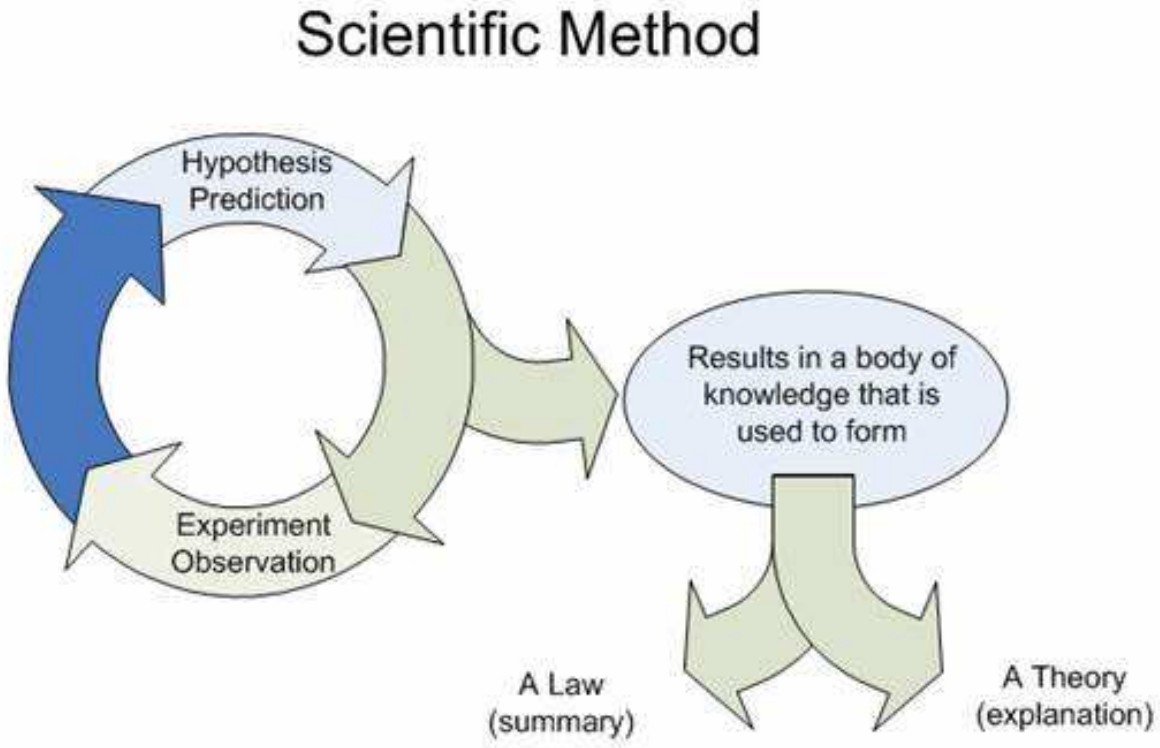
Project Monitoring and Controlling

- Canadian Imperial Bank of Commerce (CIBC) provides an excellent example of successfully controlling the schedule for a large information technology project in the banking industry.
  - CIBC transformed 20,000 workstations in 1200 different financial branches in just one year.
  - It created a Web-based tool to enable large, geographically dispersed teams to access information simultaneously.
  - Each of the 1200 sites had 75 milestones to track, including the baseline, latest plan, and actual finish dates, resulting in 90,000 data points.
  - According to Jack Newhouse, the company's director of application support,
    - CIBC's Web-based tracking tool "was a critical component to success....Accurate, timely data was an invaluable management tool."

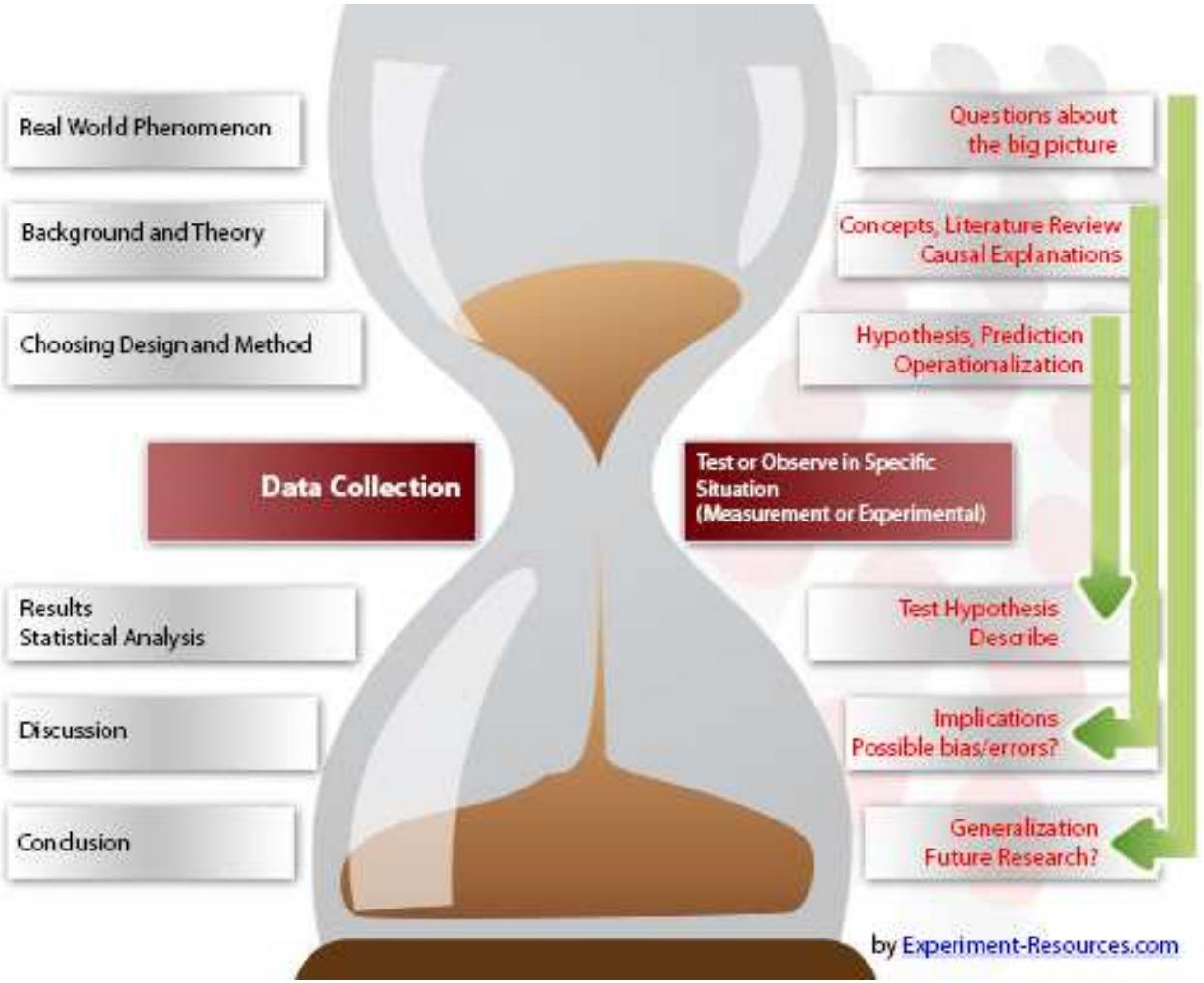
Documentation

Scientific Work Methods

Can be anything, from measuring the Doppler Shift of a distant galaxy to handing out questionnaires in a shopping centre. This may sound obvious, but this distinction stems back to the time of the Ancient Greek Philosophers.



Scientific Work Methods



IV. Time Management

- “We all have time to either spend or waste and it is our decision what to do with it. But once passed, it is gone forever.” Bruce Lee

What a Jar of Rocks, Pebbles and Sand can Teach Us About Time Management

- **Scenario 1: Starting with Sand**

  Filling a jar with the sand first is easy. It falls right in. But what about the pebbles and rocks? The pebbles still fit but when it comes time to add the larger stones, the task becomes practically impossible. The jar overflows and the biggest rocks do not fit.

Put In Other Words

Small, unimportant tasks are attractive. They are easy to complete. And are usually the most enjoyable.

Starting with the easier tasks may make the day more fun. But at the end of the day, your most important work is left largely untouched. Pushed back until *tomorrow*. Knowing all to well, tomorrow never truly comes

Time Management

Rocks first, pebbles second and if there is time, fill your jar with sand.

Scenario 2: Starting with Rocks

Adding the biggest rocks first is hard. You have to look at their size and figure the best plan of attack for fitting them all in. And then comes the pebbles. The jar needs to be shaken a bit to fit them all in. Finally, the sand can be dumped in. Easily, the sand slides between the rocks and pebbles. **Magically, the rocks and pebbles as well as all of the sand now fits into the jar.**

Put In Other Words

Your most important tasks are usually the most taxing. In this strategy, the mid and low priority tasks are put by the wayside. Confronting them only if there is time. And as a result, your day will be amazingly successful.

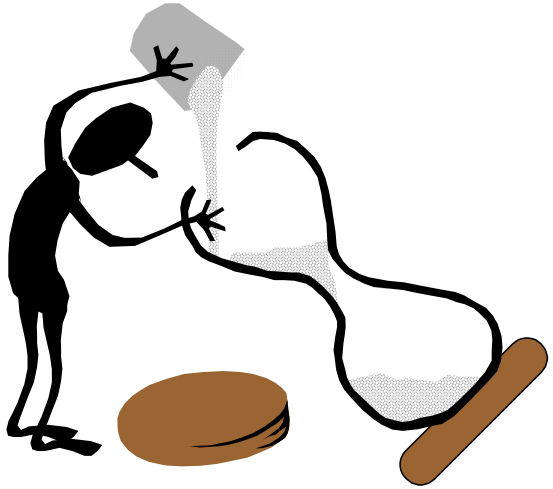
The Present

- Yesterday is History
- Tomorrow's a Mystery
- But Today is a Gift
- That's Why They Call it
- The Present

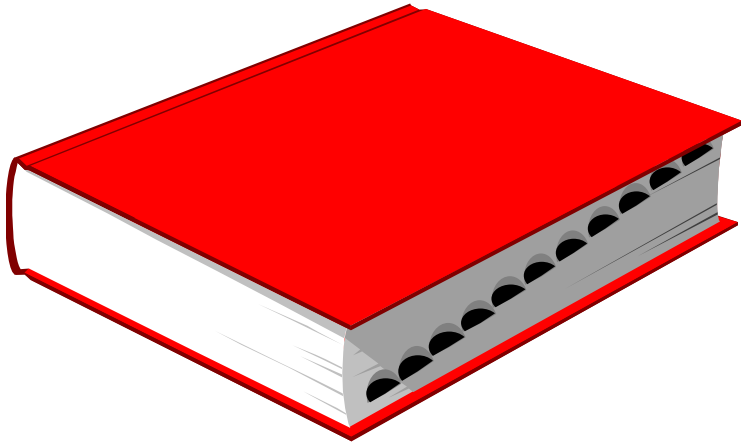
Time Management

A Cambridge University Study of first year students found the following:

- On weekdays students spent **TWICE** as much time on leisure activities as on studying.



- On weekends students spent **SIX TIMES** as much time on leisure activities as on studying



Time Management

To realize the value of the Time:

- ONE YEAR, ask a student who failed a grade.
- ONE MONTH, ask a mother who gave birth to a premature baby.
- ONE WEEK, ask the editor of a weekly newspaper.
- ONE DAY, ask a daily wage laborer with kids to feed.
- ONE HOUR, ask the lovers who are waiting to meet.
- ONE MINUTE, ask a person who missed the train.
- ONE SECOND, ask a person who just avoided an accident.
- ONE MILLISECOND, ask the person who won a silver medal in the Olympics.

Time Management

- A father gave his son a bundle of sticks and asked him to break it. After the boy struggled, the father took the bundle, untied it and broke one stick at a time.
- We procrastinate because the “A” tasks seem too lengthy or too difficult
  - Divide a lengthy task into smaller, shorter parts that seem easier to complete
  - Divide a forty page chapter into 10 page sections
  - Reward yourself after completing each section.

Time Management

The point is this:

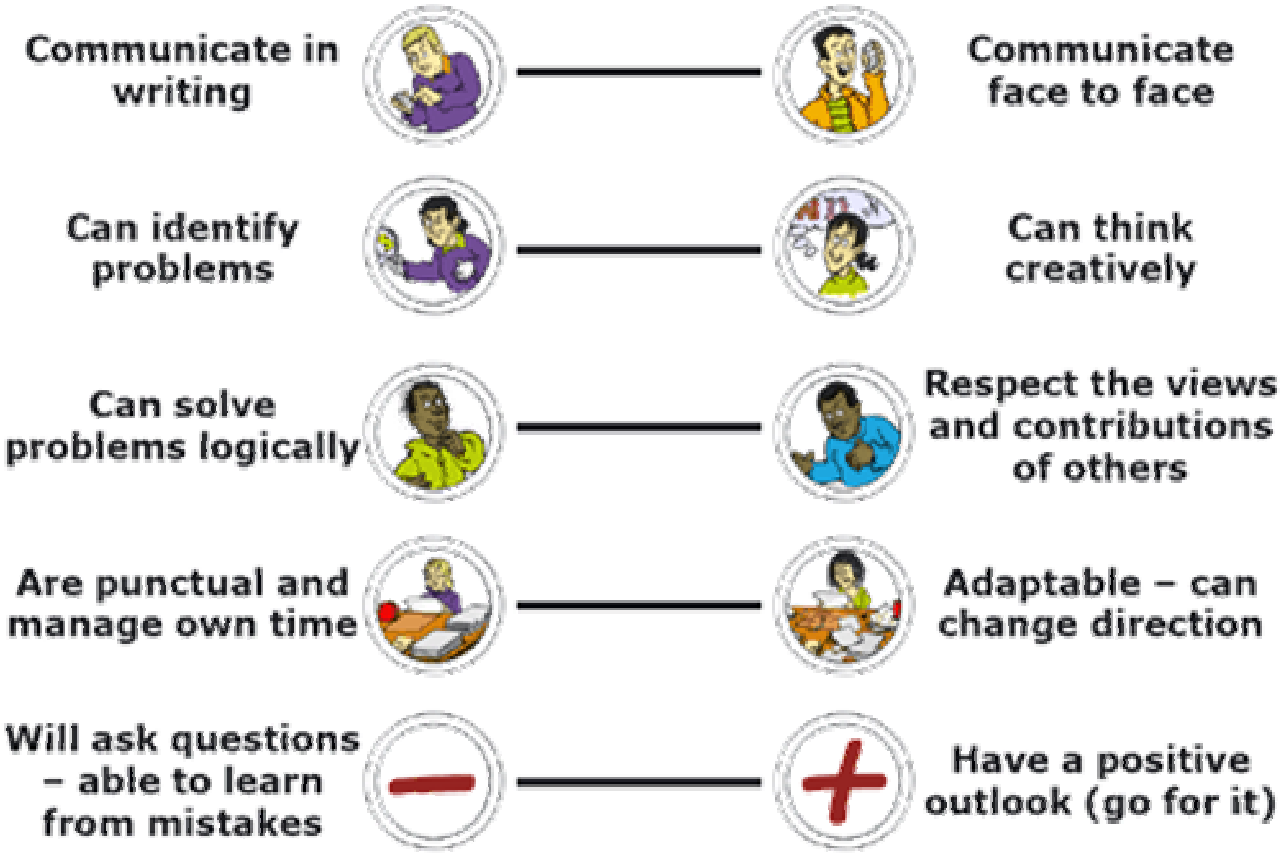
Put the Big Rocks in First

What Industry Wants: Search by the employers for better productivity and performance

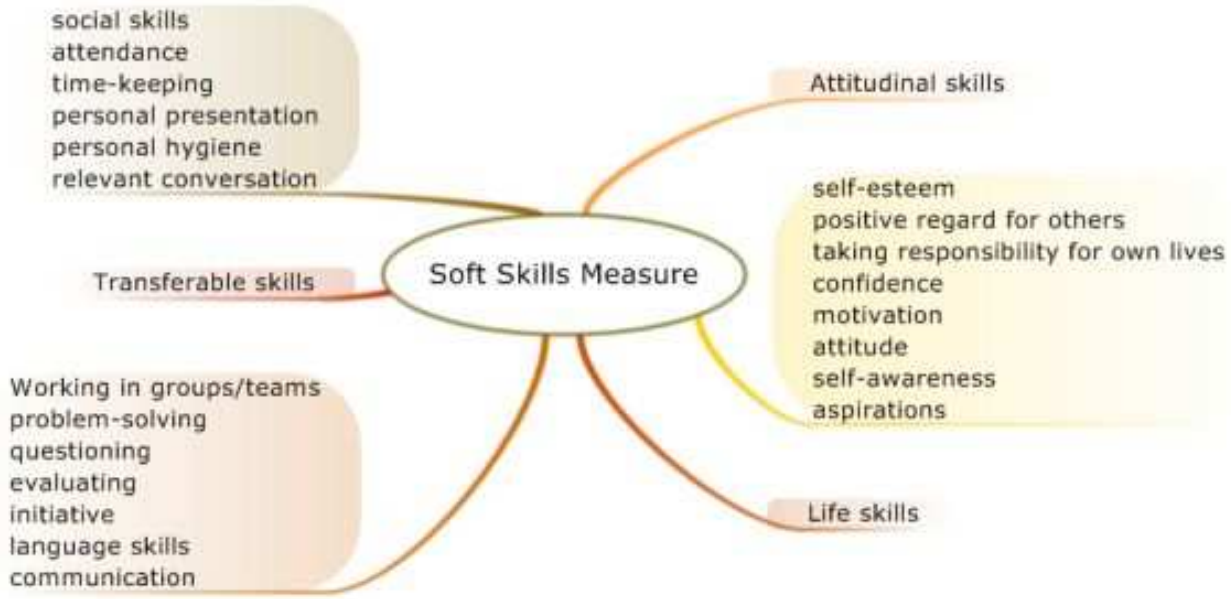
Soft Skill and Employment Enhancement

As a result soft skills are also known as **employability skills.** However, students passing out of educational institutions don‘t posses these skills. On the other hand, they are good at hard skills.

Soft Skill and Employment Enhancement



What are employability skills: All business cry for soft skills as these enable their growth and competitiveness. These skills are essential for all employers cutting across all industtries.



What Do Employers Want in Employees?

„Soft skills“ versus Hard Skills“

Personal Qualities:

- Responsibility
- Self-esteem
- Sociability
- Self-management
- Integrity/honesty

Soft Skill and Employment Enhancement

Soft Skills in the highly competitive corporate world will help you to „stand out“ in a crowd of routine job seekers and mediocre skills and taletn

There are „60 soft skills“ that employers look for when looking for new employee

Do you have eny of these traits, that makes you the best?

Nr. 3 Courtesy

- Polite
- Considerate behavior
- Good manners

Nr. 4 Honesty

- Moral uprightness – the quality, condition or characteristics of being fair, truthful and morally upright

Nr. 9 Eye Contact

- The act of looking directly into the eyes of another person

Nr. 11 Flexibility

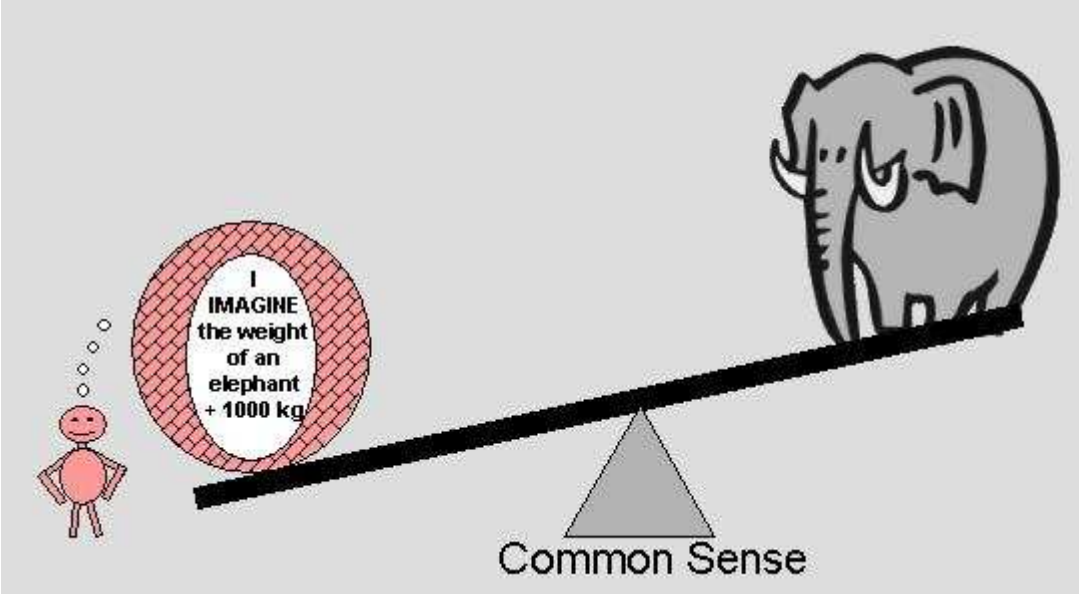
- The ability to adapt to new situations
- The ability to change or be changed according to circumstances

Nr. 27 Good Work History

- Time spent at a place of employment
- Show your loyality or longevity to an organization

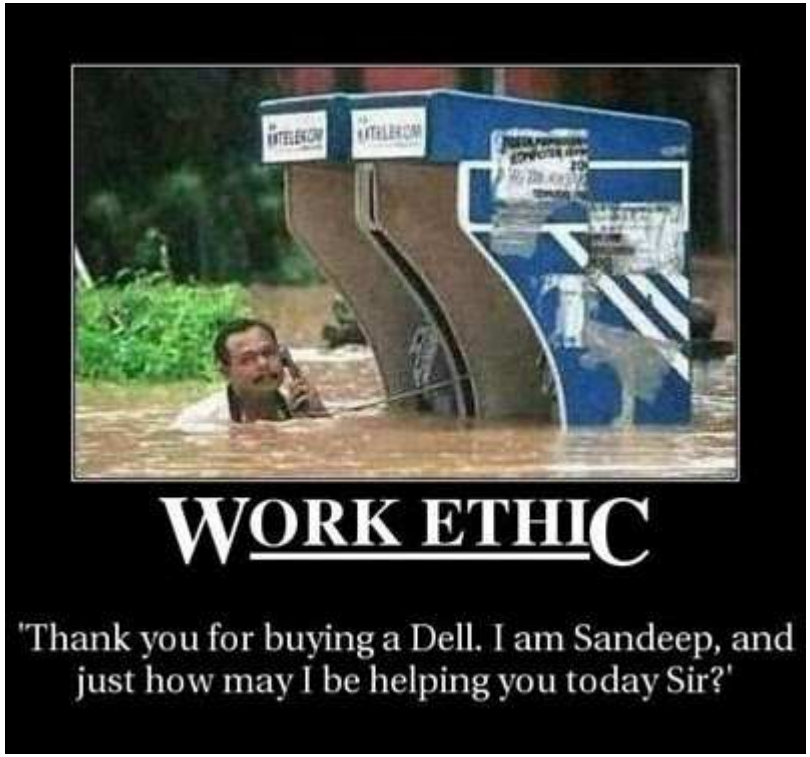
Nr. 34 Common Sense

- Good Judgment – sound practical judgement derived from „experience“ rather than a study.



Nr. 28 Good Ethic

- Belief in the moral value of work
- A dedication to work, or belief in the moral value of hard work



Nr. 39 Good and Appropriate Personal Appearence

- Visual aspect of a person – with regards to personal cleanness and neatness of clothing and style

Nr. 44 Willingness to be Accountable

- Responsible
- Able to be explained

Nr. 46 Willingness to Learn

- Come to know something - to acquire knowledge of a subject or skill through education or experience
- Find/Memorize something

Nr. 57 Ability to relate tc cowoorkers in a close environment

- Connetcion with people

Nr. 57 Ability to relate to cowoorkers in a close environment

- Connetcion with people

Nr 59 Willingness to be a good worker and go beyond the traditional „8“ Hour Day

- A person who will go the „extra mile“ when the time arise
- A person who will stay late and do „over-time“ when need be

How many Soft Skills do you Possess?

If you are lacking….

Each day pick a soft skill(s) to work on in order to get Soft Skills numbers up

You can do it

It just takes practice…