Project Resource Management

Yong Zhang
2020-11

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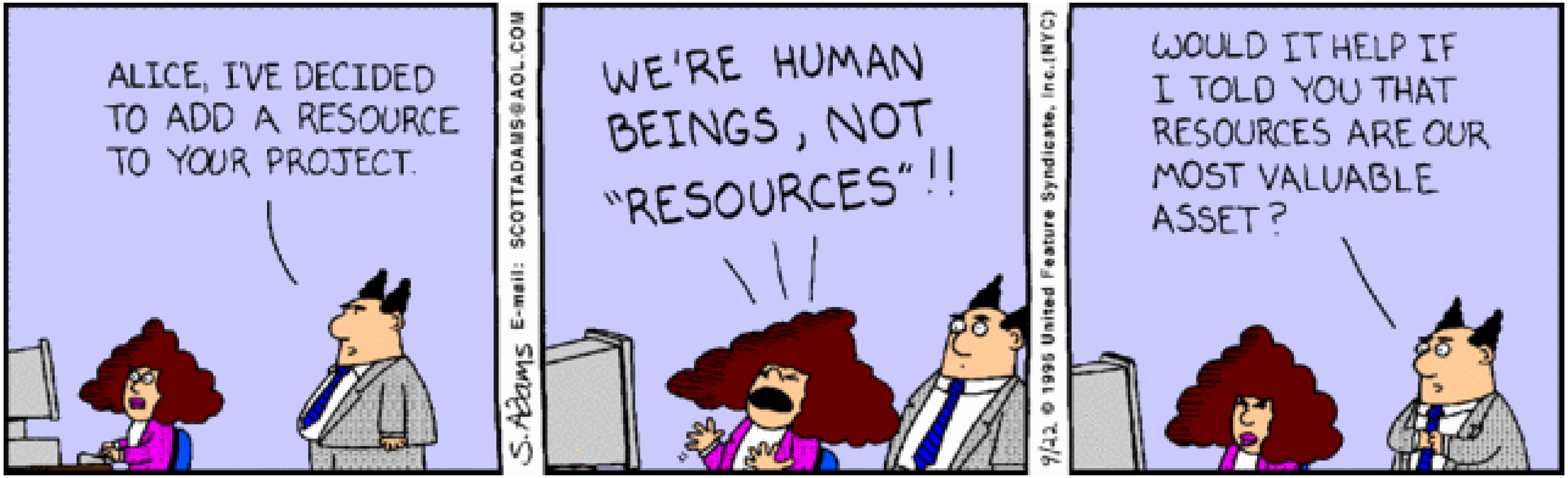
Contents

- Why?
- What is resource management?
- Plan Resource Management
- Estimate Activity Resources
- Acquire Resources
- Develop Team
- Manage Team
- Control Resources
- Key concepts of managing people
- Software

Bye!

Reasons of Resignation (China)

- (19)60s: What is resignation?
- 70s: Why resign?
- 80s: Higher salary
- 90s: The boss scolds me
- 95s: I feel unhappy
- 00s: The boss is not obedient


ALICE, I'VE DECIDED TO ADD A RESOURCE TO YOUR PROJECT.
S. ADAMS E-mail: SCOTTADAMS@AOL.COM
WE'RE HUMAN BEINGS, NOT "RESOURCES"!!
9/22 © 1998 United Feature Syndicate, Inc.(NYC)
WOULD IT HELP IF I TOLD YOU THAT RESOURCES ARE OUR MOST VALUABLE ASSET?

Resource Management

Importance of Resource Management

- Physical resources help people to do the work
- People are our most important assets
- Projects are done by people and for people
- People determine the success and failure of organizations and projects
- Qualified people are hard to find and keep
- Motivation: how people work vs. how WELL people work

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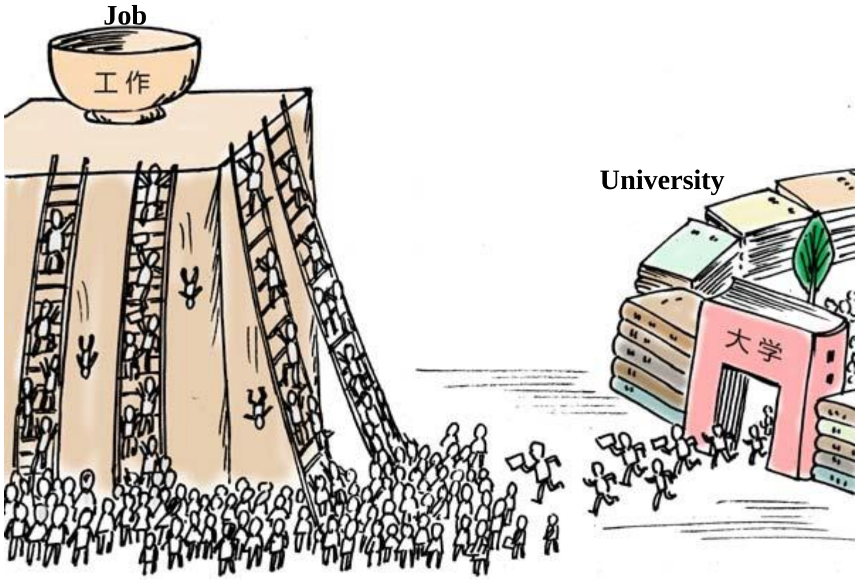
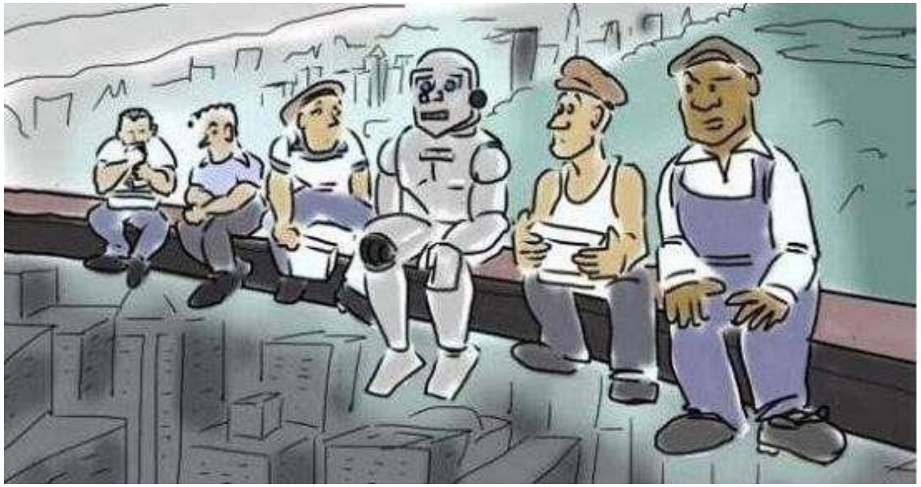
Global IT Workforce

- 2020.9, there were 4.9 billion Internet users
- 2025, 100 billion connections
- By 2020, global ICT spending - $5.5 trillion
- Project management by Computerworld’s: 5(2014) 2(2015) just behind programming/application development
- PMI: 2020 - 15.7 million project management jobs, 6.2 million of those jobs in the United States.

Greatest Assets vs Job Market

1990s ↑ → 2000s ↓ → Now ?


Job
工作
University
大学



Gaps in IT Workforce(CompTIA 2014)

- Even with 5.73 million people working in the U.S. IT industry, 68% IT firms report having a “very challenging” time finding new staff.
- 52% organizations report having job openings, and 33% say they are understaffed, while 42% say they are fully staffed but want to hire more people in order to expand.
- 58% businesses are concerned about the quality and quantity of IT talent available for hire.
- The number one strategy to handle understaffing is requiring workers to put in more hours.
- 94% IT professionals plan to pursue more training.

Different Attitudes in Different Situations?

Buyer’s market vs Seller’s market

Fulfill their human resource needs and the needs of individual people in their organizations regardless of job market

Proactive Organizations

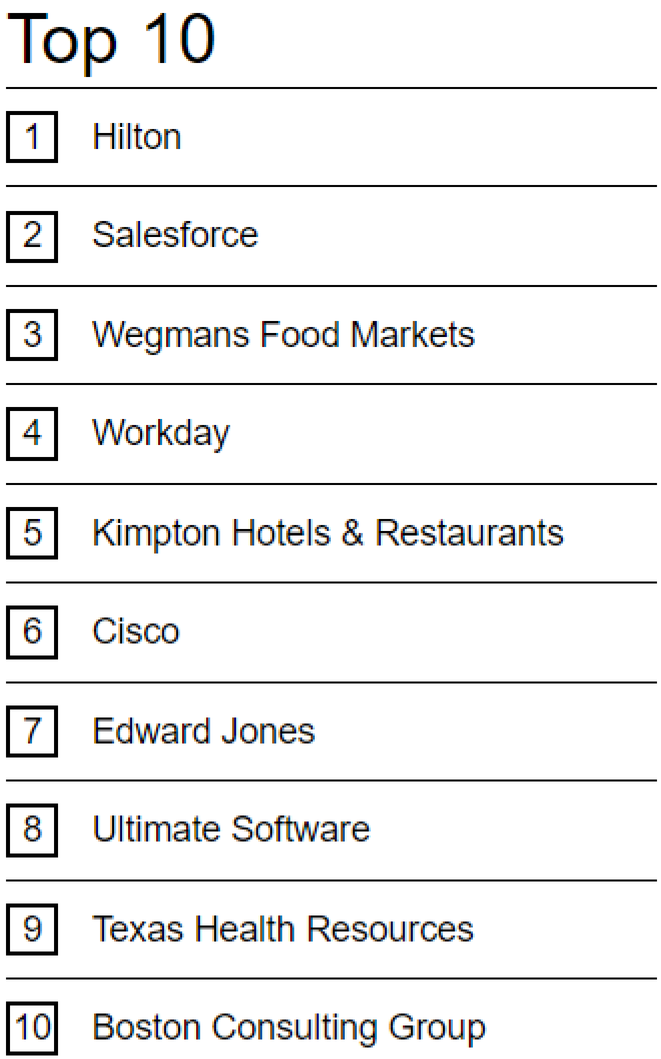
- Improve benefits – perks such as casual dress codes, tuition assistance, on-site day care
- Redefine work hours and incentives – flexible work hours, fitness club discounts
- Find future workers

If your company is in bad conditions?

Example of Proactive Organization

- Google, the winner of Fortune's 100 Best Companies award in 2007, 2008, 2012 - 2017
- free gourmet **meal**
- **doctors** on site
- a swimming **spa**
- corporate **gym**(beach volleyball, Foosball, video games, pool tables, ping-pong, roller hockey)
- **leave**(18 weeks for mother, 12 weeks for father)
- With an average of 130 applicants per hire, it's almost **ten times harder** to get a job at Google than it is to get into Harvard.

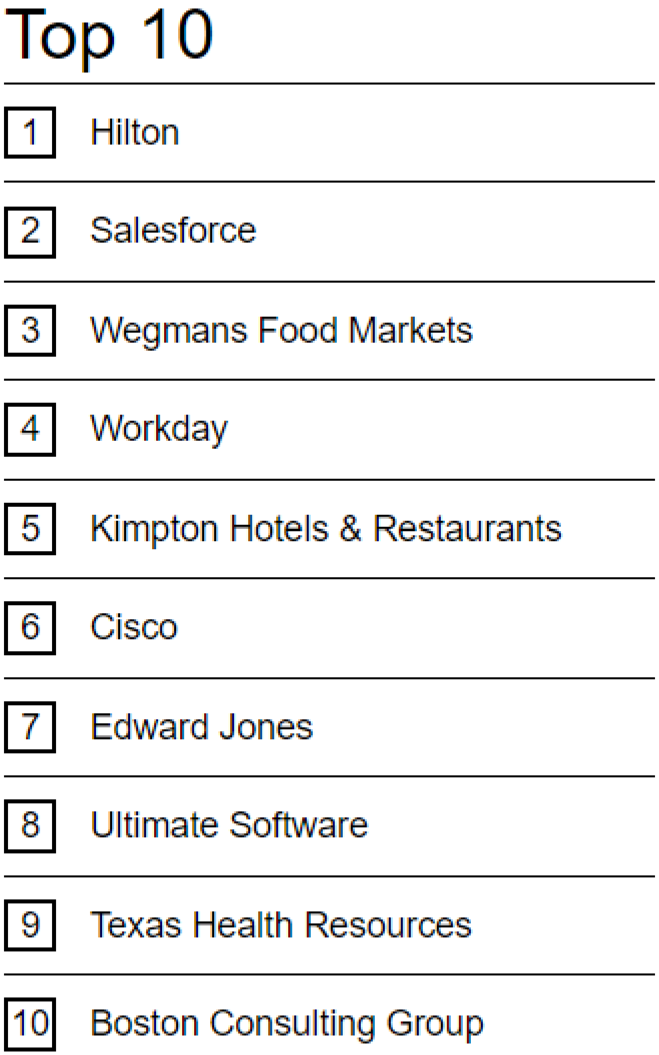
The Winner of Fortune’s 100 Best Companies Award 2019



Top 10

1	Hilton
2	Salesforce
3	Wegmans Food Markets
4	Workday
5	Kimpton Hotels & Restaurants
6	Cisco
7	Edward Jones
8	Ultimate Software
9	Texas Health Resources
10	Boston Consulting Group

The winner of Fortune's 100 Best Companies award 2019/2020



Top 10

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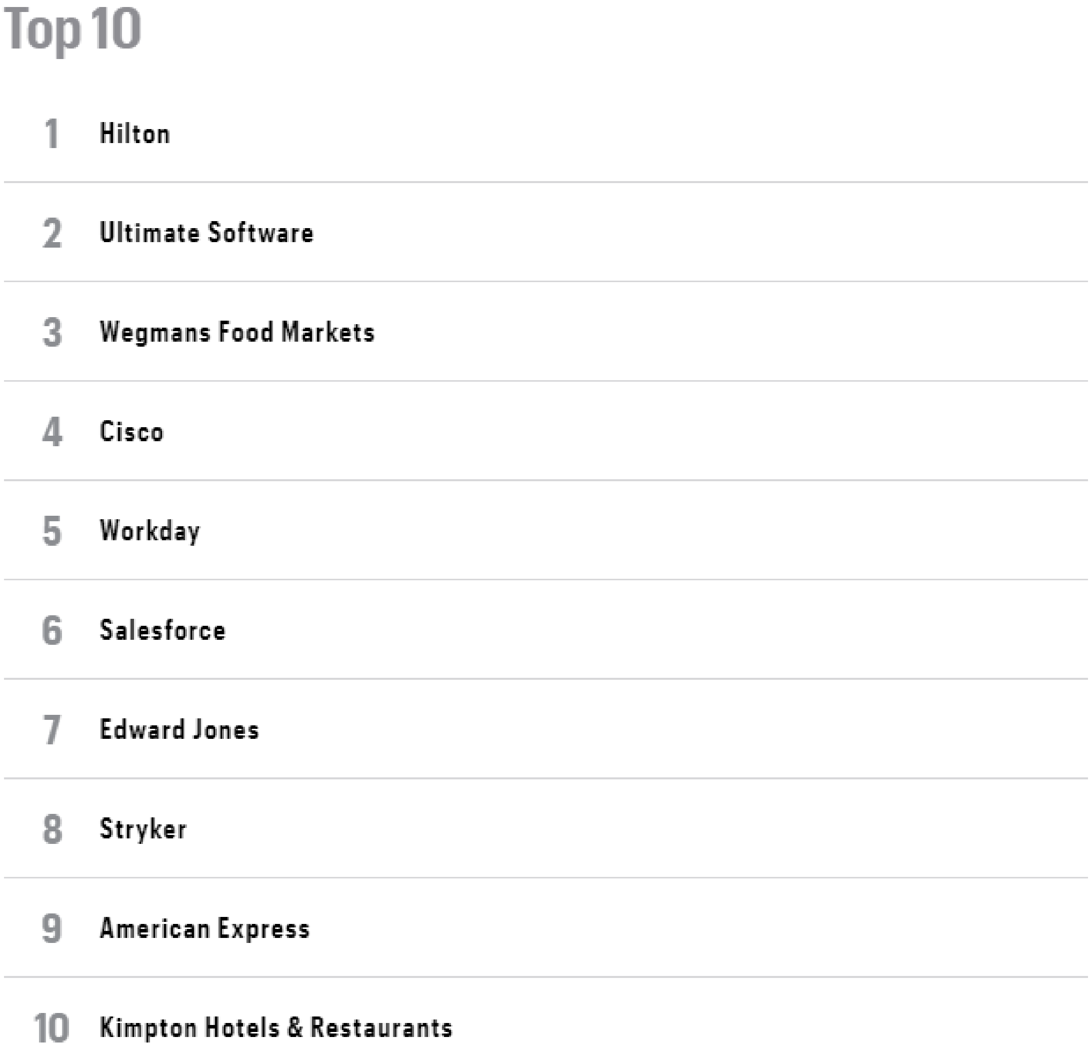


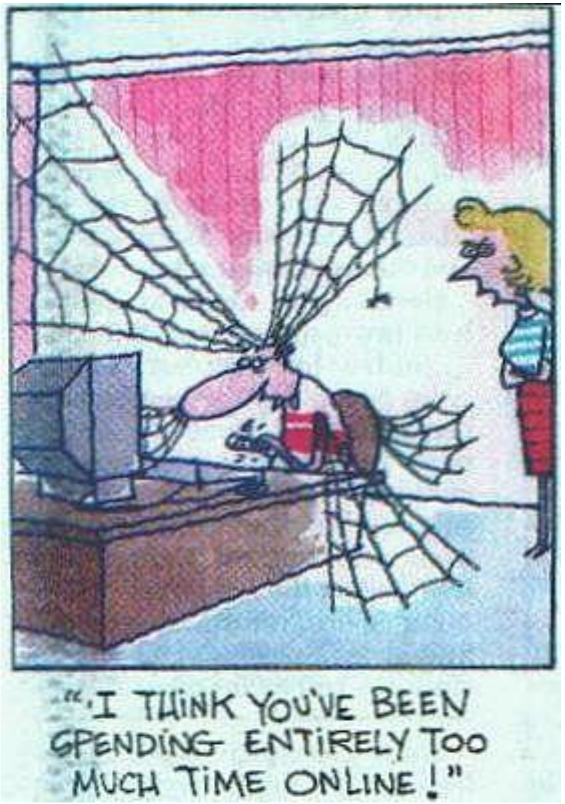
Top 10

1	Hilton
2	Ultimate Software
3	Wegmans Food Markets
4	Cisco
5	Workday
6	Salesforce
7	Edward Jones
8	Stryker
9	American Express
10	Kimpton Hotels & Restaurants

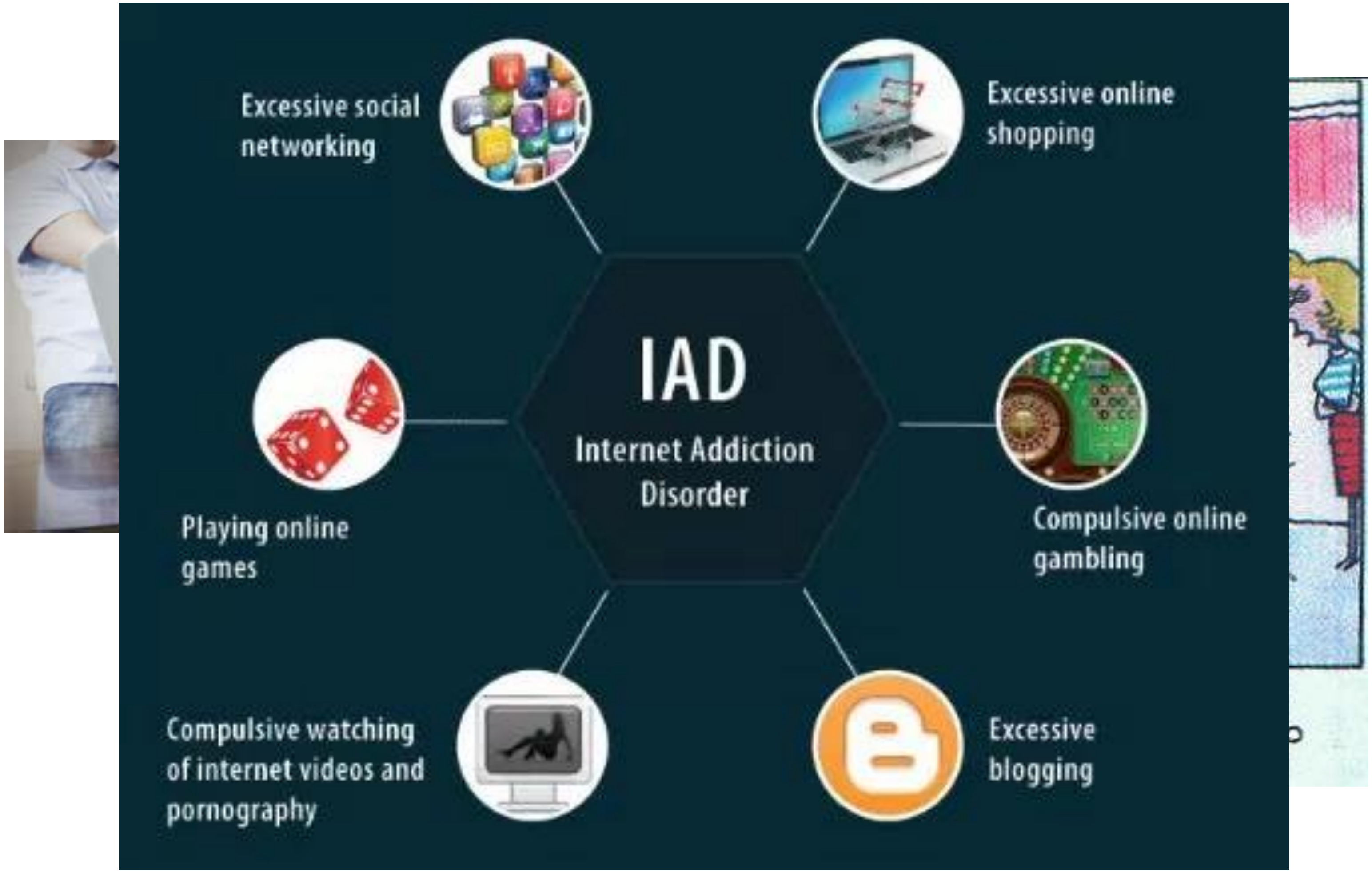
http://fortune.com/best-companies/

IAD (Internet Addiction Disorder)

© iStockphoto / Thinkstock

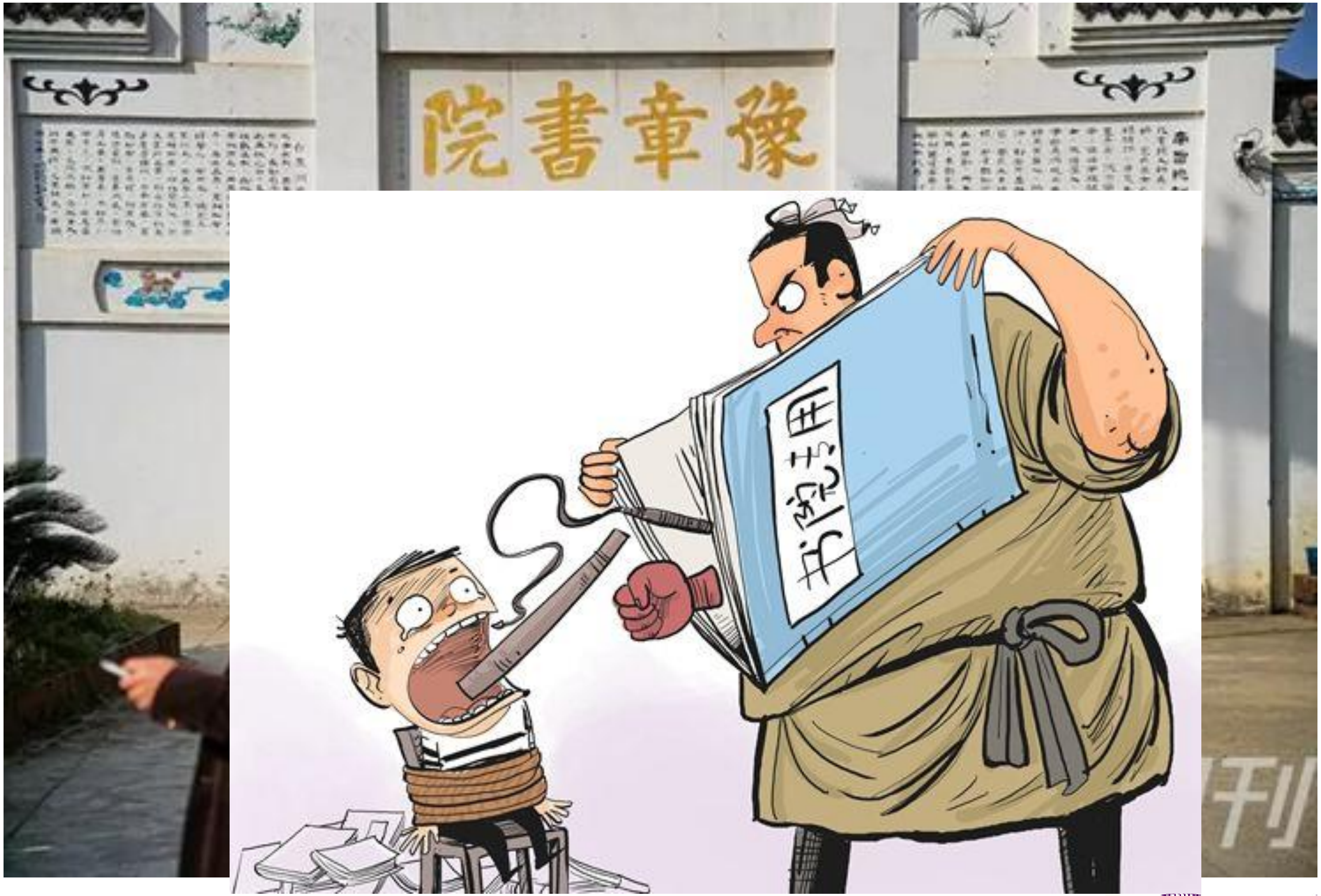

"I THINK YOU'VE BEEN SPENDING ENTIRELY TOO MUCH TIME ONLINE!"

IAD


IAD
Internet Addiction Disorder
Excessive social networking
Excessive online shopping
Playing online games
Compulsive online gambling
Compulsive watching of internet videos and pornography
Excessive blogging

Yu Zhang Shu Yuan

Yu Zhang Shu Yuan



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Resources

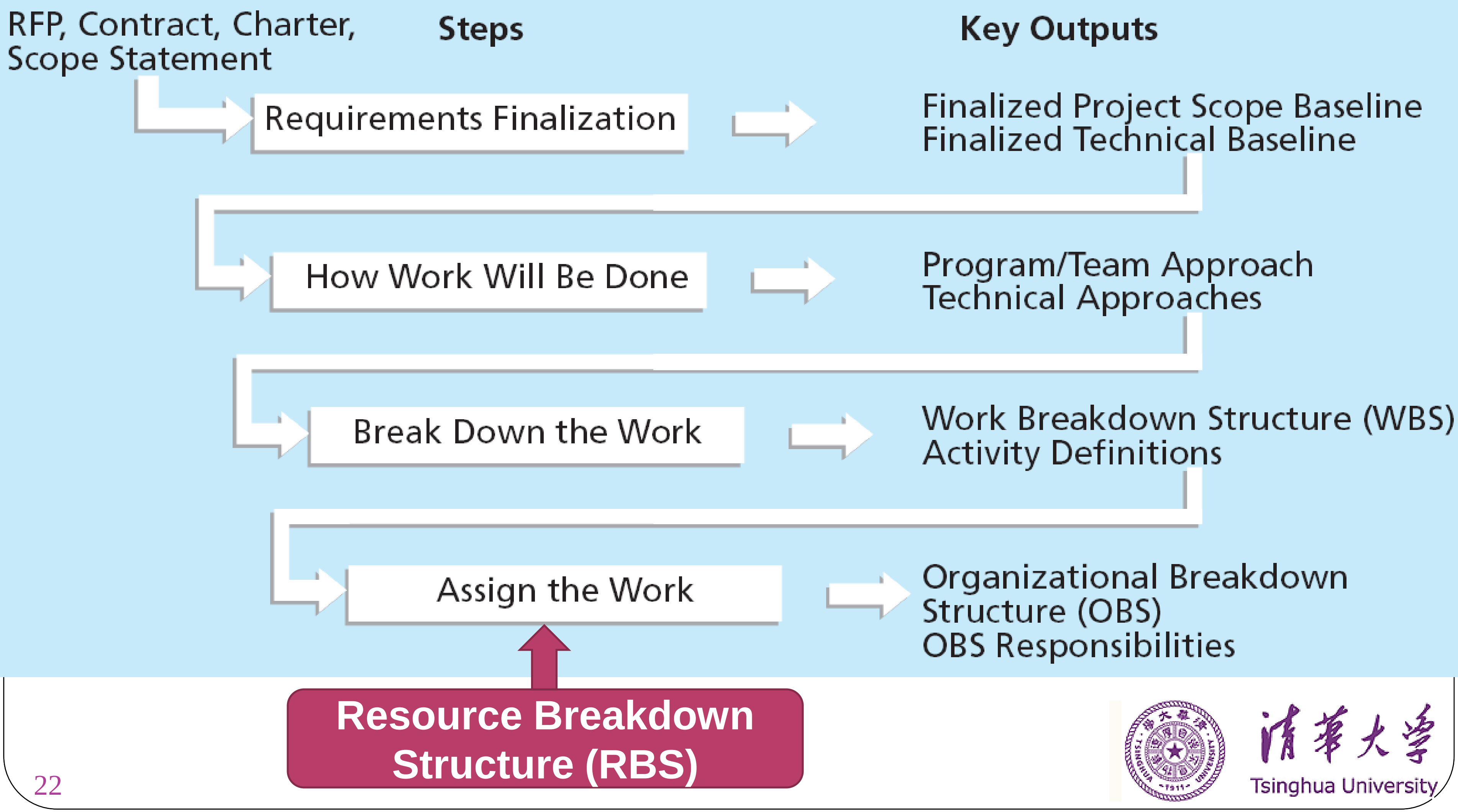
- **Physical resources** include equipment, materials, facilities, and supplies.
- **Team resources** or personnel refer to the human resources. Personnel may have varied skill sets, may be assigned full- or part-time, and may be added or removed from the project team as the project progresses.

Project Team

The project team consists of individuals with assigned roles and responsibilities who work collectively to achieve a shared project goal.

Should we involve all team members in project planning and decision making?

Work Definition and Assignment



RFP, Contract, Charter, Scope Statement

Steps

Key Outputs

Requirements Finalization → Finalized Project Scope Baseline
Finalized Technical Baseline

How Work Will Be Done → Program/Team Approach
Technical Approaches

Break Down the Work → Work Breakdown Structure (WBS)
Activity Definitions

Assign the Work → Organizational Breakdown Structure (OBS)
OBS Responsibilities

Resource Breakdown Structure (RBS)

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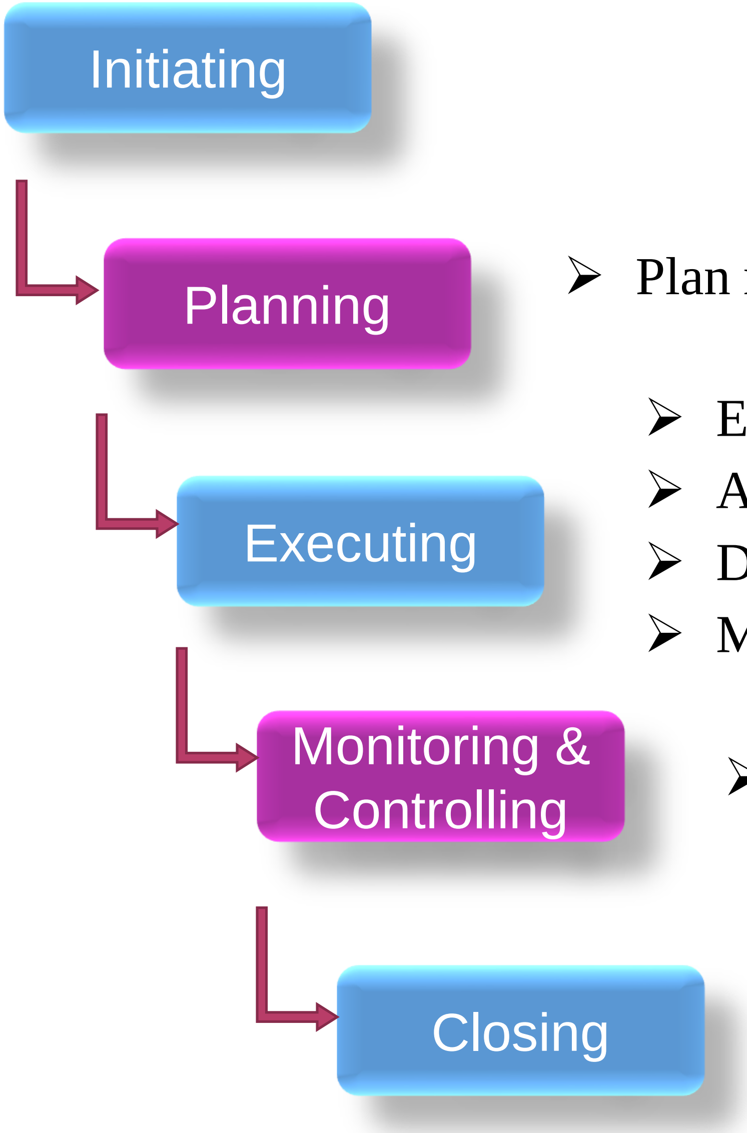
Resource Management

The processes to **identify**, **acquire**, and **manage** the resources needed for the successful completion of the project

These processes help ensure that the right resources will be available to the project manager and project team at the right time and place

Resource Risks

- Failing to secure critical equipment or infrastructure on time may result in delays in the manufacturing of the final product
- Ordering low-quality material may damage the quality of the product
- Keeping too much inventory may result in high operation costs and reduce the organization’s profit. Low inventory level?
- An experienced engineer’s leave may delay the software development



Initiating

Planning

- ➢ Plan resource management
  - ➢ Estimate activity resources

Executing

- ➢ Acquire resources
- ➢ Develop team
- ➢ Manage team

Monitoring & Controlling

- ➢ Control resources

Closing

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Plan Resource Management

The process of defining how to estimate, acquire, manage, and use team and physical resources.

Inputs	Tools & Techniques	Outputs
1. Project charter 2. Project management plan 3. Project documents 4. Enterprise environmental factors 5. Organizational process assets	1. Expert judgment 2. Data representation 3. Organizational theory 4. Meetings	1. Resource management plan 2. Team charter 3. Project documents updates

Key benefit: It establishes the approach and level of management effort needed for managing project resources based on the type and complexity of the project.

Resource Planning

- Determine and identify an approach to ensure that sufficient resources are available for the successful completion of the project
- Effective resource planning should consider and plan for the availability of, or competition for, scarce resources
- Those resources can be obtained from the organization’s internal assets or from outside the organization through a procurement process

Resource Management Plan

- Identification of resources
- Acquiring resources
- Roles and responsibilities
- Project organization charts
- Project team resource management
- Training
- Team development
- Resource control
- Recognition plan

Roles and Responsibilities

- Role. The function assumed by, or assigned to, a person in the project, such as …
- Authority. The rights to apply project resources, make decisions, sign approvals, accept deliverables, and influence others to carry out the work of the project
- Responsibility. The assigned duties and work that a project team member is expected to perform in order to complete the project’s activities
- Competence. The skill and capacity required to complete assigned activities within the project constraints

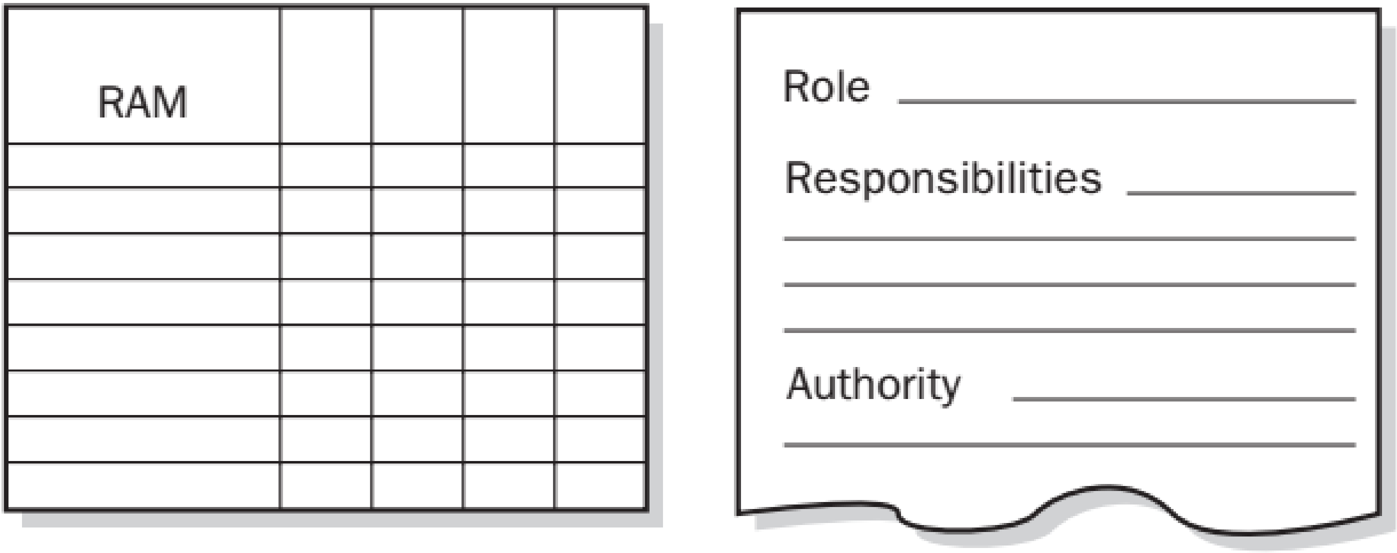
When team members operate best?

What if project team members do not possess required competencies?

Team Charter

- Team values
- Communication guidelines
- Decision-making criteria and process
- Conflict resolution process
- Meeting guidelines
- Team agreements

Roles and Responsibility Definition Formats


RAM
Role
Responsibilities
Authority

Responsibility Chart (matrix)

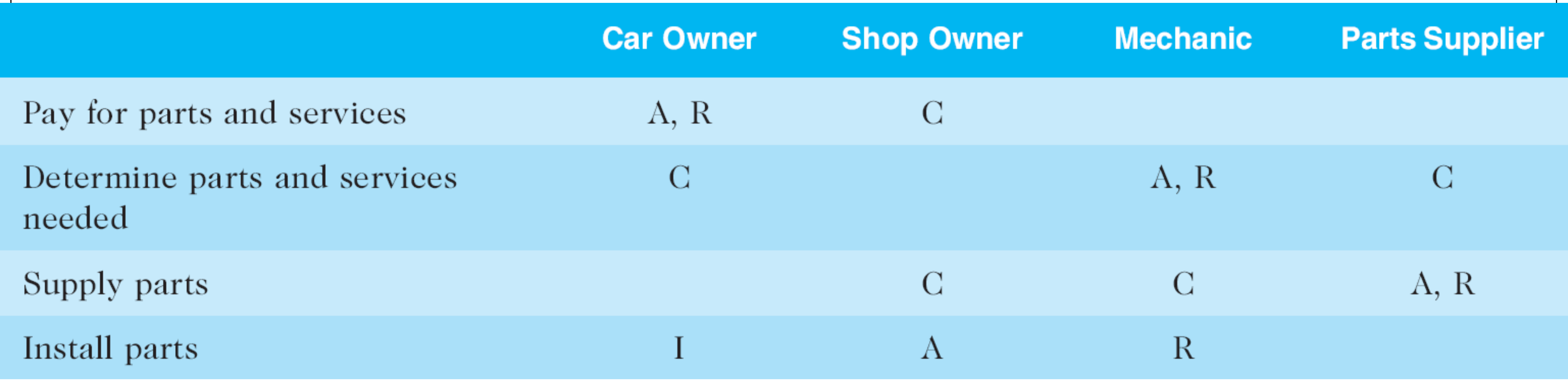
Role Description (text)

Sample Responsibility Assignment Matrix (RAM)

WBS activities / OBS units	1.1.1	1.1.2	1.1.3	1.1.4	1.1.5	1.1.6	1.1.7	1.1.8
System Engineering	R	R&P					R	
SW Development			R&P					
HW Development				R&P				
Test Engineering	P							
Quality Assurance					R&P			
Configuration Management						R&P		
Integrated Logistics Support							P	
Training								R&P

Sample RACI Chart

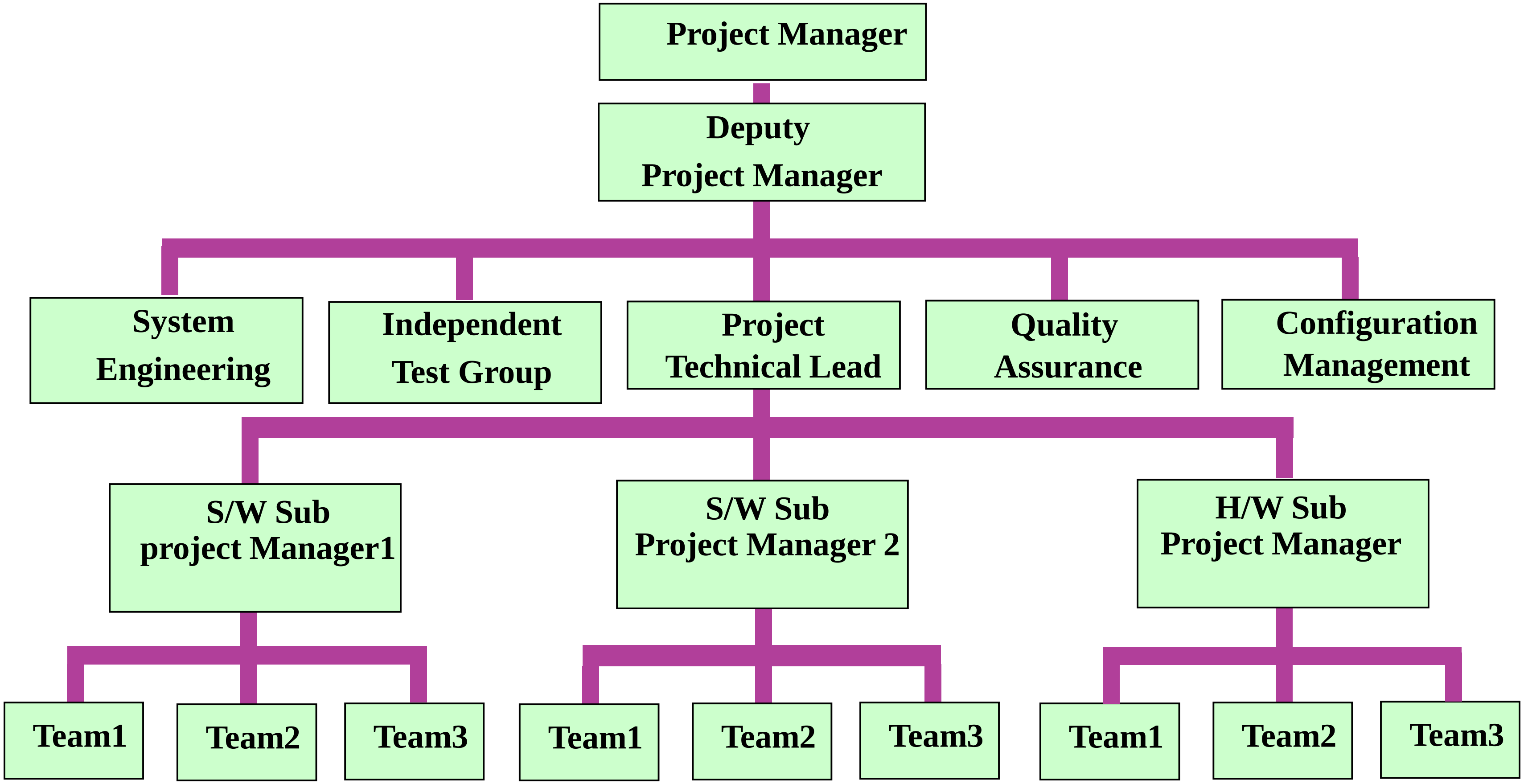
- Responsibility: Who does the task?
- Accountability: Who signs off on the task or has authority for it?
- Consultation: Who has information necessary to complete the task?
- Informed: Who needs to be notified of task status and results?



	Car Owner	Shop Owner	Mechanic	Parts Supplier
Pay for parts and services	A, R	C		
Determine parts and services needed	C		A, R	C
Supply parts		C	C	A, R
Install parts	I	A	R	

Project Organizational Charts

- Diversity of project team members require a clear organizational structure
- Identify important skills and the types of people needed to staff a project
- Clear defining and allocating project work is essential



Project Manager

Deputy Project Manager

System Engineering

Independent Test Group

Project Technical Lead

Quality Assurance

Configuration Management

S/W Sub project Manager1

S/W Sub Project Manager 2

H/W Sub Project Manager

Team1

Team2

Team3

Team1

Team2

Team3

Team1

Team2

Team3

Staffing Management Plan

1. Staff acquisition
2. Resource calendars
3. Staff release plan
4. Training needs
5. Recognition and rewards
6. Compliance
7. Safety

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Estimate Activity Resources

The process of estimating team resources and the type and quantities of material, equipment, and supplies necessary to perform project work

Inputs	Tools & Techniques	Outputs
1. Project management plan 2. Project documents 3. Enterprise environmental factors 4. Organizational process assets	1. Expert judgment 2. Bottom-up estimating 3. Analogous estimating 4. Parametric estimating 5. Data analysis 6. Project management information system 7. Meetings	1. Resource requirements 2. Basis of estimates 3. Resource breakdown structure 4. Project documents updates

Key benefits: type, quantity, and characteristics

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Questions for Estimation

- Difficulty?
- Anything unique?
- History?
- Capability? Availability?
- More resources? Outsource?

Resource Estimating

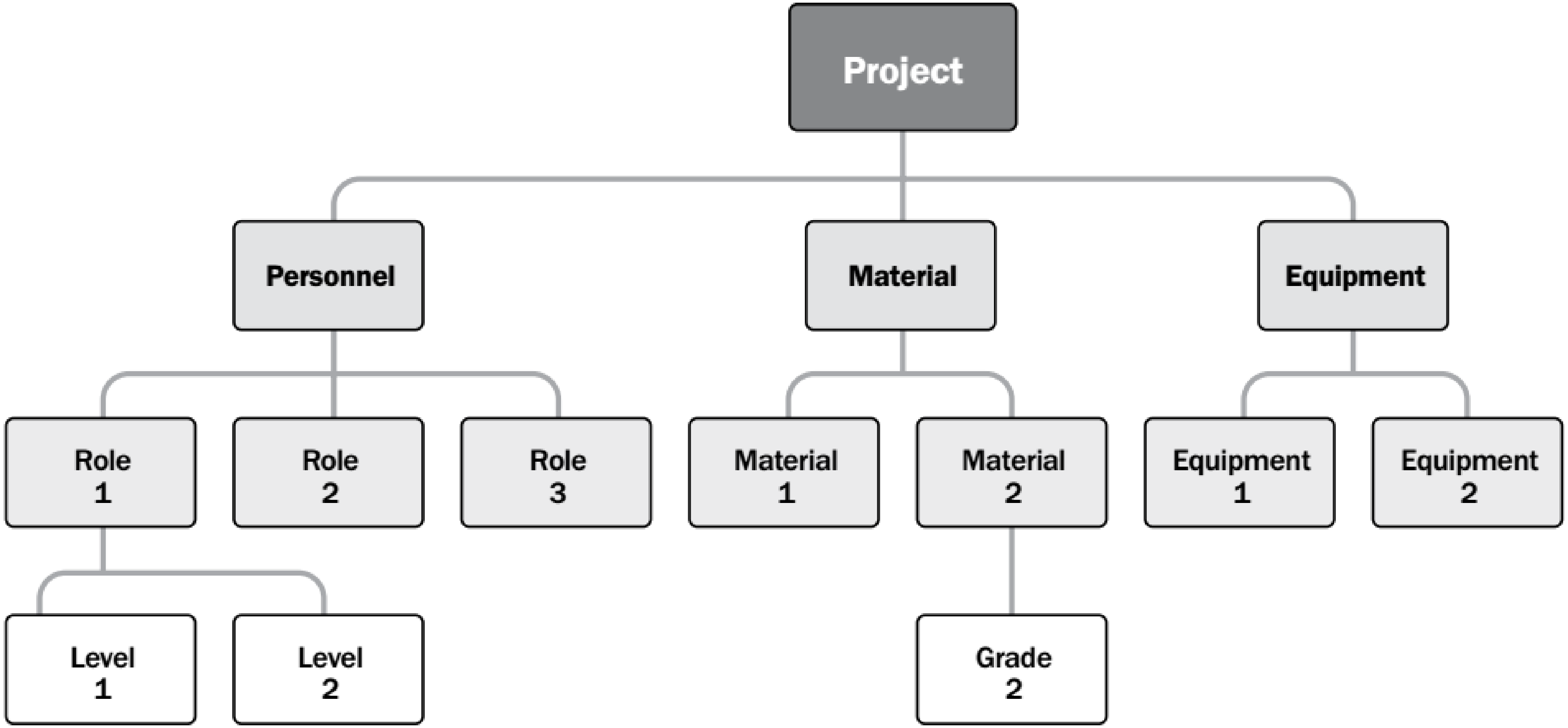
1. Expert judgment
2. Bottom-up estimating
3. Analogous estimating
4. Parametric estimating
5. Data analysis
6. Project management information system
7. Meetings

Resource Requirements

Identify the types and quantities of resources required for each work package or activity in a work package and can be aggregated to determine the estimated resources for each work package, each WBS branch, and the project as a whole

Resource Breakdown Structure

A hierarchical structure that identifies the project's resources by category and type



Project

Personnel

Material

Equipment

Role 1

Role 2

Role 3

Material 1

Material 2

Equipment 1

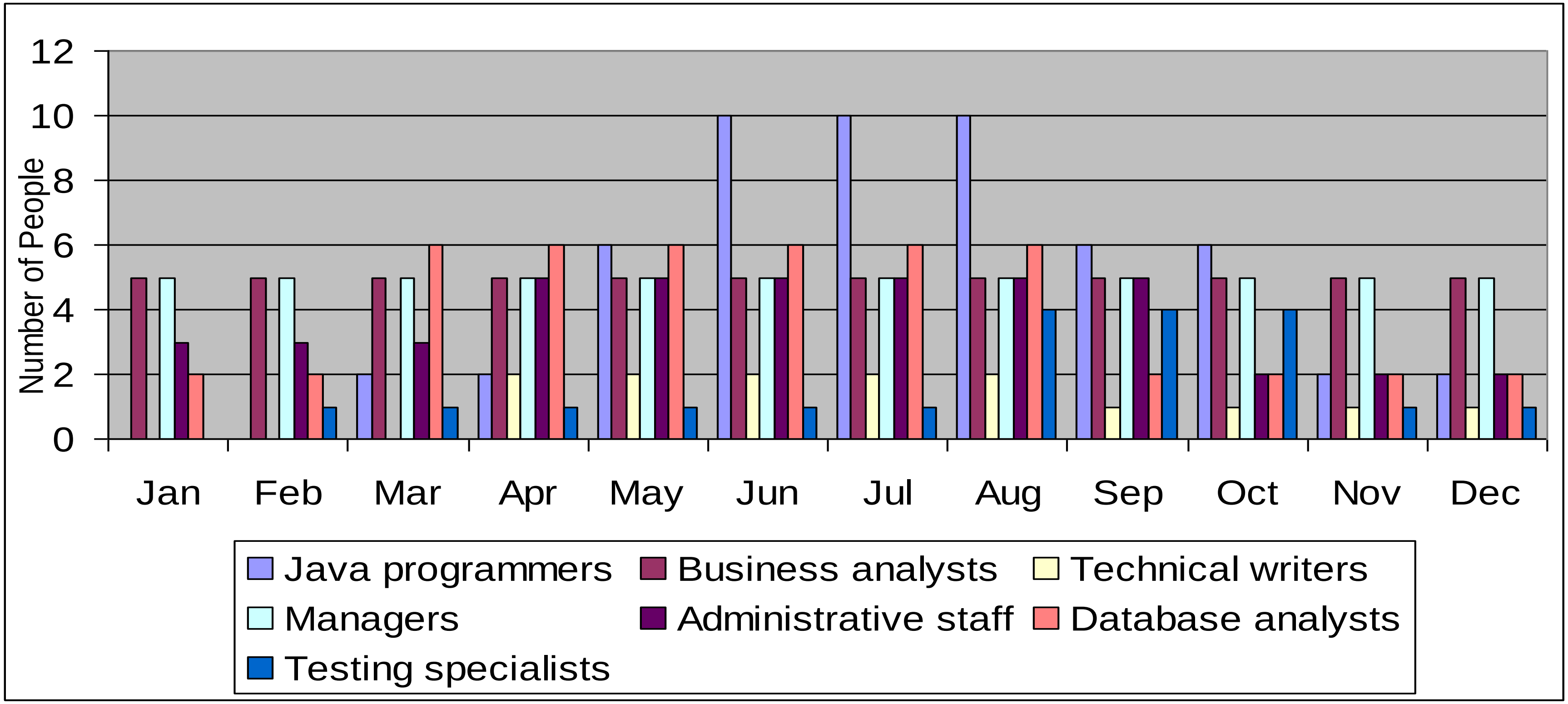
Equipment 2

Level 1

Level 2

Grade 2

Resource Histograms



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Acquire Resources

The process of obtaining team members, facilities, equipment, materials, supplies, and other resources necessary to complete project work

Inputs	Tools & Techniques	Outputs
1. Project management plan 2. Project documents 3. Enterprise environmental factors 4. Organizational process assets	1. Decision making 2. Interpersonal and team skills 3. Pre-assignment 4. Virtual teams	1. Physical resource assignments 2. Project team assignments 3. Resource calendars 4. Change requests 5. Project management plan updates 6. Project documents updates 7. Enterprise environmental factors updates 8. Organizational process assets updates

Factors Considered

- The project manager or project team should effectively negotiate and influence others who are in a position to provide the required team and physical resources for the project
- Failure to acquire the necessary resources for the project may affect project schedules, budgets, customer satisfaction, quality, and risks
- If the team resources are not available, the project manager or project team may be required to assign alternative resources

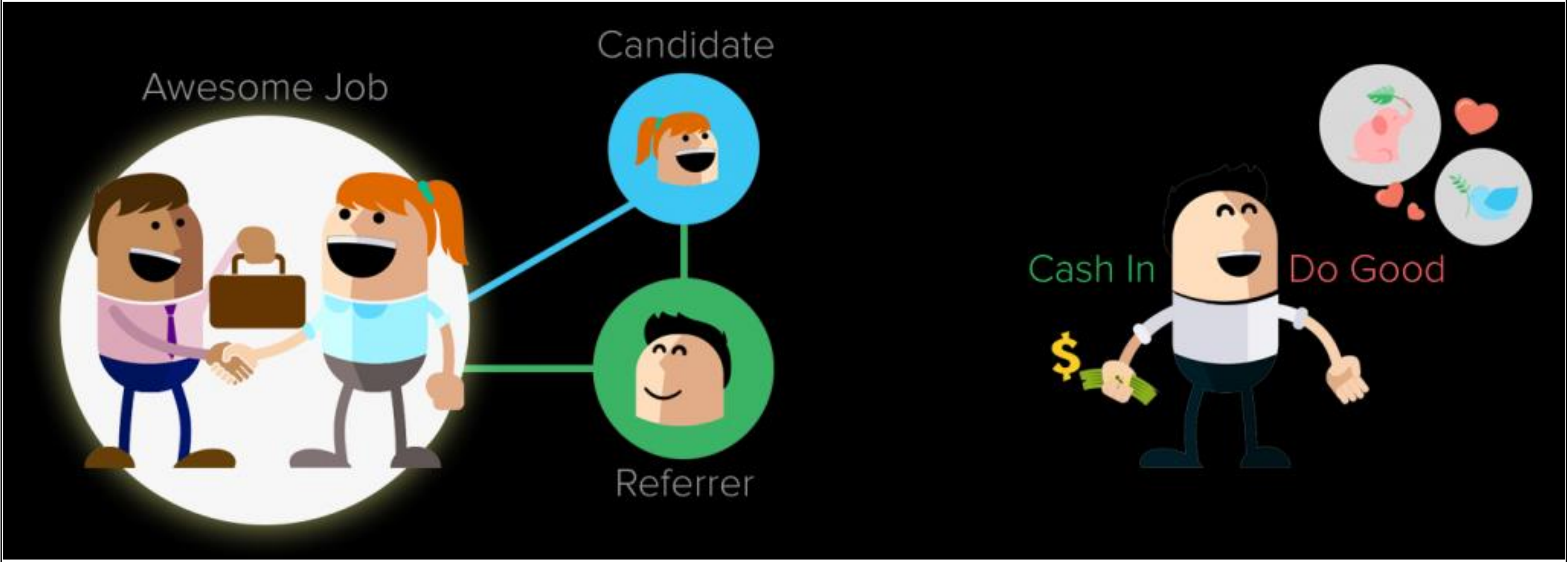
Resource Assignment

Assign resources or acquire additional resources

- Organizations that do a good job of staff acquisition have good staffing plans
  - Current situation vs. expected increase
  - Complete and accurate inventory of skills
- Additional resources:
  - Hiring subcontractors and recruiting new employees
  - Referral Program
- Two considerations:
  - Recruiting and retention decision based on individual and organizational needs (such as flexible hours)
  - Virtual teams

Resource Assignment

Assign resources or acquire additional resources


Awesome Job
Candidate
Referrer
Cash In
$
Do Good

- Recruiting and retention decision based on individual and organizational needs (such as flexible hours)
- Virtual teams

Resource Assignment

Assign resources or acquire additional resources

- Organizations that do a good job of staff acquisition have good staffing plans
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  - Virtual teams

Resource Calendar

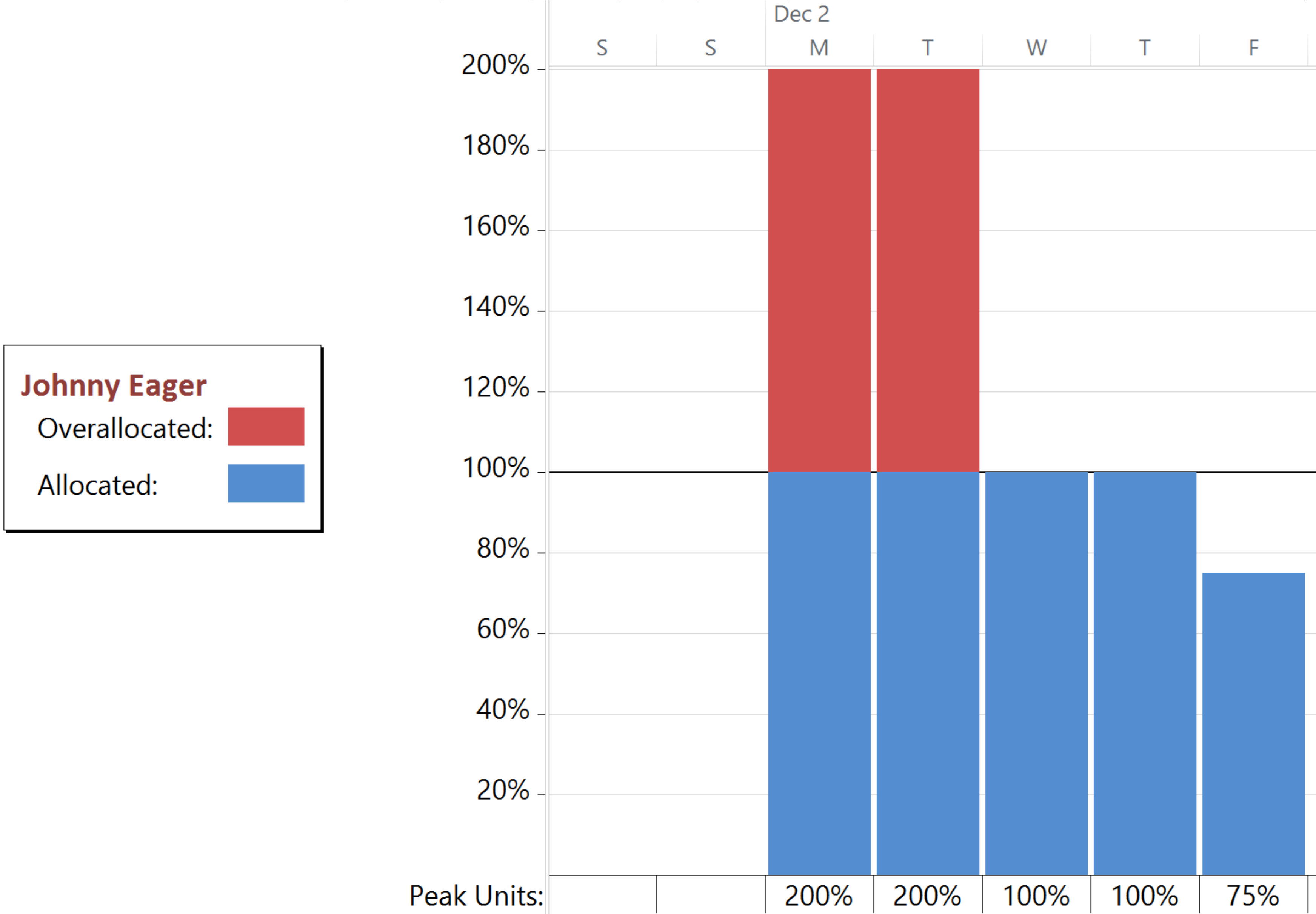
- A resource calendar is a calendar that identifies the working days, shifts, start and end of normal business hours, weekends, and public holidays when each specific resource is available.
- This information may be at the activity or project level.
- This knowledge includes consideration of attributes such as resource **experience** and/or **skill** level, as well as various **geographical** locations from which the resources originate and **when** they may be available.

Resource Loading

Refers to the amount of individual resources that an existing schedule requires during specific time periods.

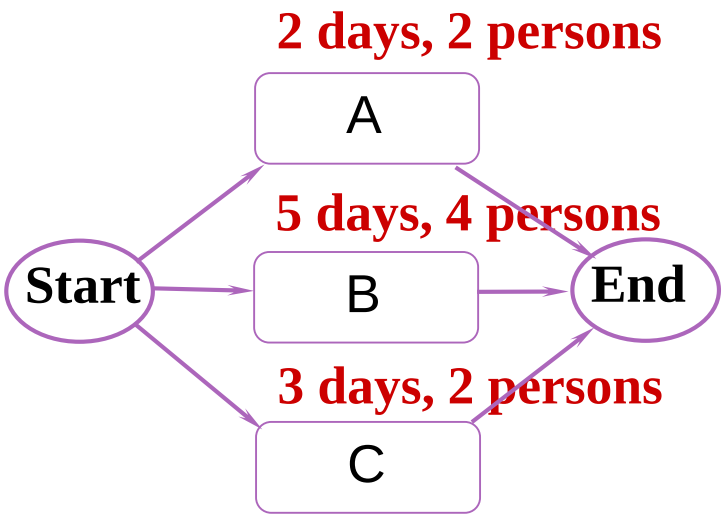
- Project manager needs to balance the trade-offs among performance, time and cost
- Histograms help project managers to depict period-by-period variations in resource loading.
- Over-allocation: more resources than available are assigned at a given time

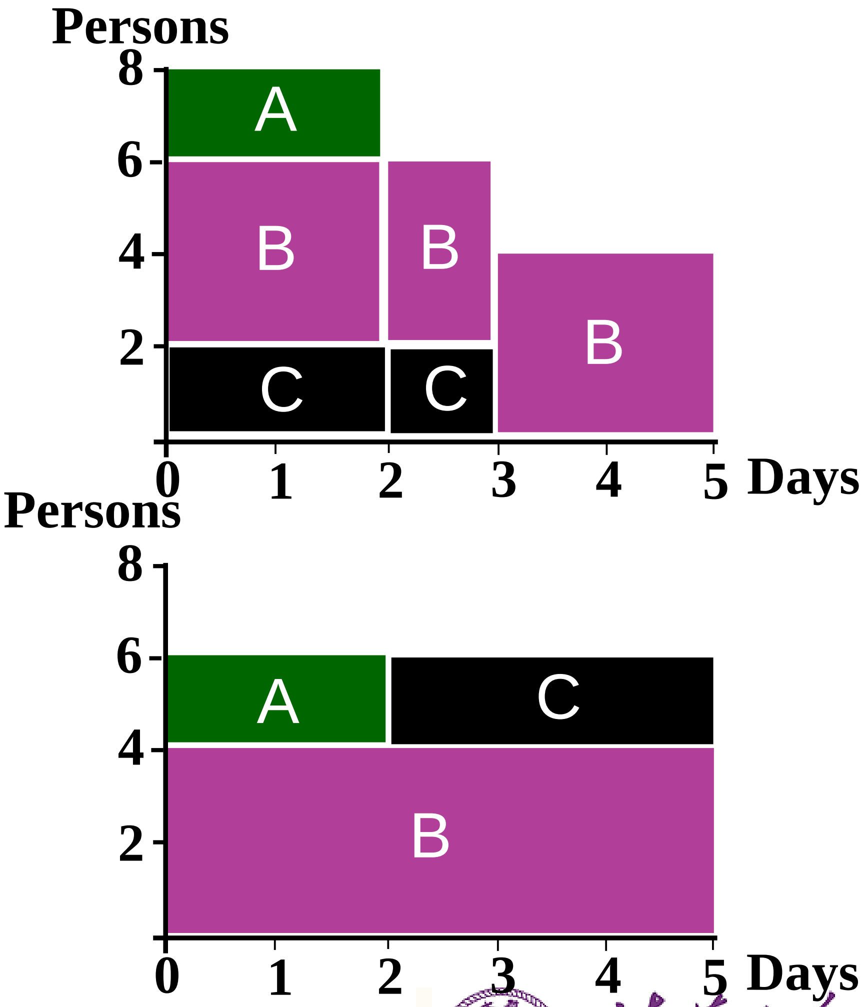
Over-allocation



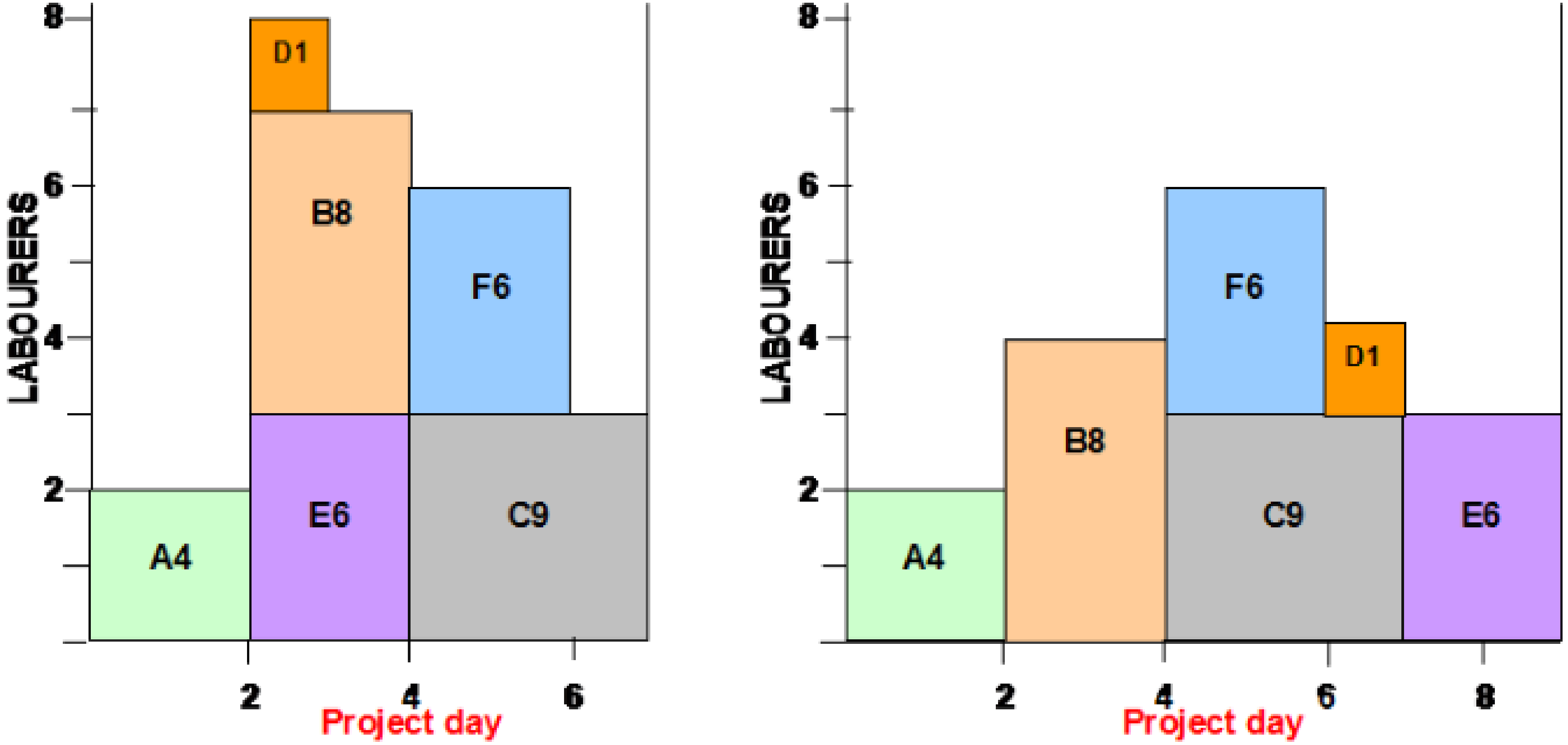
Resource Leveling

- Resource Leveling is a technique for resolving resource conflicts by delaying tasks
- Purpose: to create a smoother distribution of resource usage


2 days, 2 persons
A
5 days, 4 persons
Start
B
End
3 days, 2 persons
C



Resource Leveling



Benefits of Resource Leveling

- Less management required for stable team
- Enable PM to use just-in-time inventory type of policy for using subcontractors or other expensive resources
- Results in fewer problems for project personnel and accounting departments
- Improves morale by having some stability in their jobs

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Develop Project Team

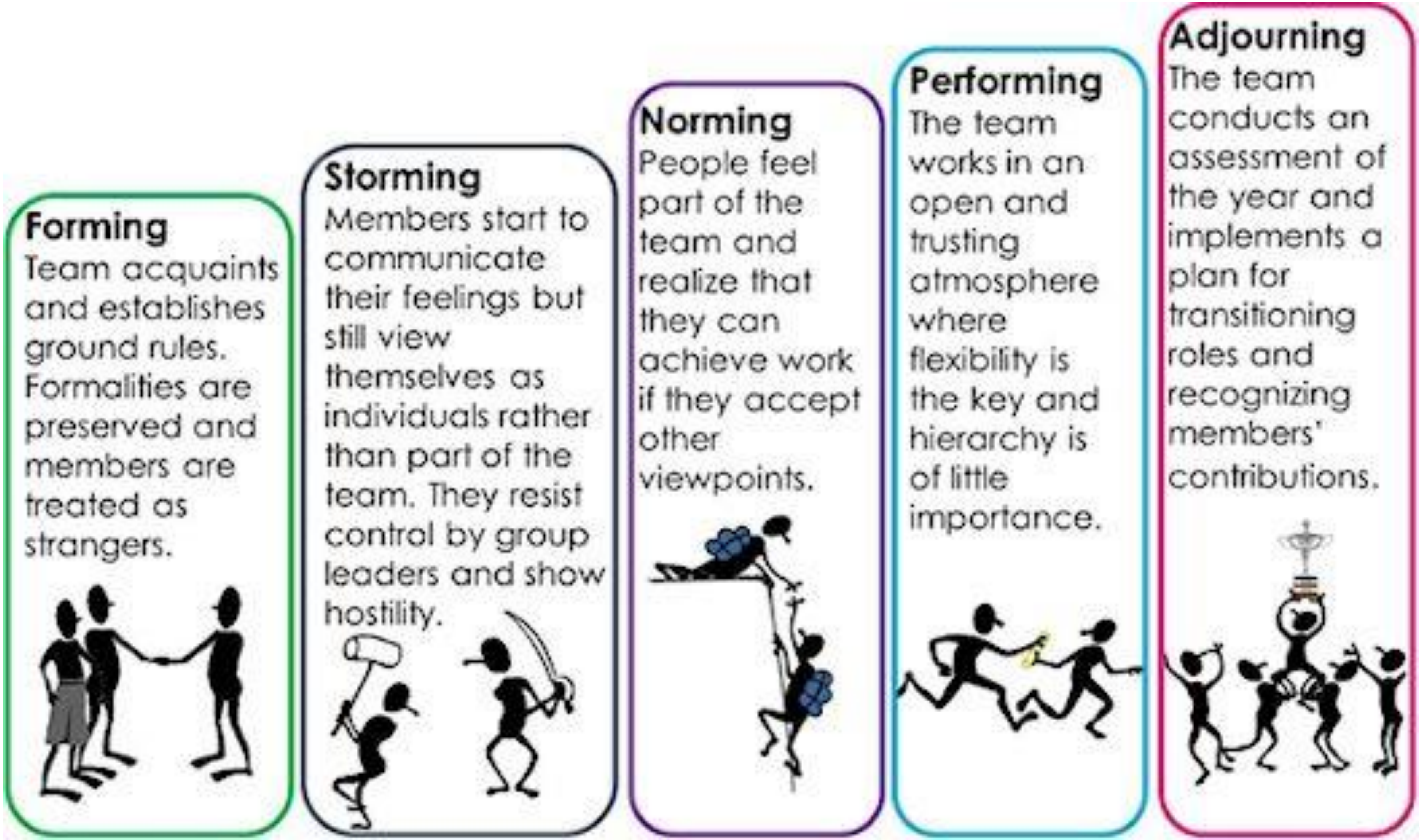
The process of improving competencies, team member interaction, and overall team environment to enhance project performance

Inputs	Tools & Techniques	Outputs
1. Project management plan 2. Project documents 3. Enterprise environmental factors 4. Organizational process assets	1. Colocation 2. Virtual teams 3. Communication technology 4. Interpersonal and team skills 5. Recognition and rewards 6. Training 7. Individual and team assessments 8. Meetings	1. Team performance assessments 2. Change requests 3. Project management plan updates 4. Project documents updates 5. Enterprise environmental factors updates 6. Organizational process assets updates

Objectives of Developing a Project Team

- Improving the knowledge and skills of team members
- Improving feelings of trust and agreement among team members to raise morale, lower conflict, and increase teamwork
- Create a dynamic, cohesive, and collaborative team culture: (1) individual; (2) share
- Empowering the team to participate in decision making and take ownership of the provided solutions

The Tuckman Team Development Model



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.

Tools of Team Development

1. Training
2. Team-building activities
3. Reward and recognition systems

Training

Includes all activities designed to enhance the competencies of the project team members.

Training

- For both individuals and team
- 70-20-10 model: self-learning, learning from peer, classroom training
- Make sure timing and delivery method for the training is appropriate for specific situations and individuals
- Case: Six Sigma Black Belt training for high-potential employees, when they have a Six Sigma project approved

Who should pay for the training cost?

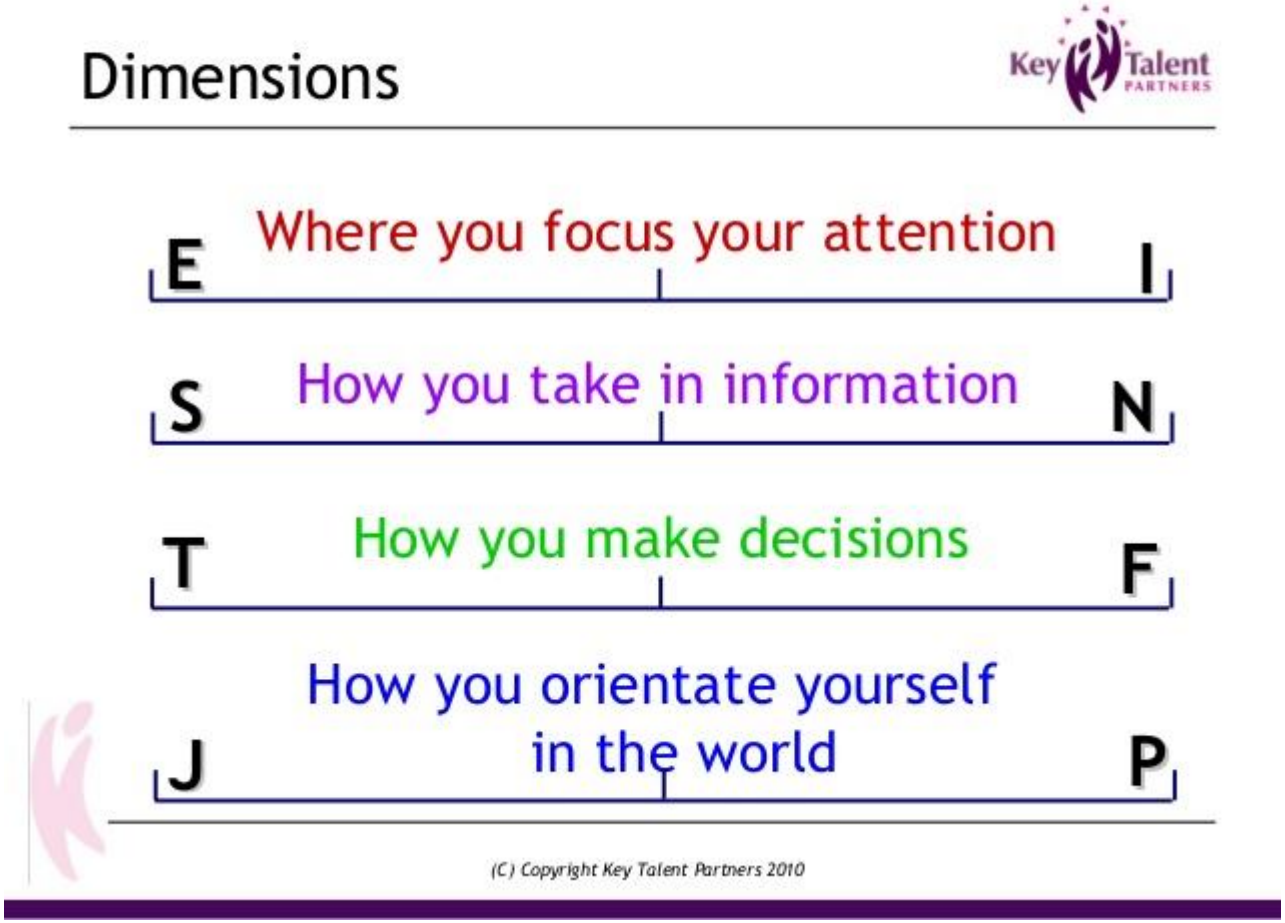
How to build trust?

TEAM BUILDING

策吧网

Team-Building Activities

- Physical challenges vs psychological preference indicator tools
- In-house and external specialized services
- Myers-Briggs Type Indicator (MBTI)
  - Extrovert/Introvert(E/I): where the energy comes from
  - Sensation/iNtuition(S/N): manner of information collection
  - Thinking/Feeling(T/F): make judgment
  - Judgment/Perception(J/P): attitude towards structure
- Wilson Learning Social Styles Profile
- DISC Profile



Dimensions

Where you focus your attention

E — I

How you take in information

S — N

How you make decisions

T — F

How you orientate yourself in the world

J — P

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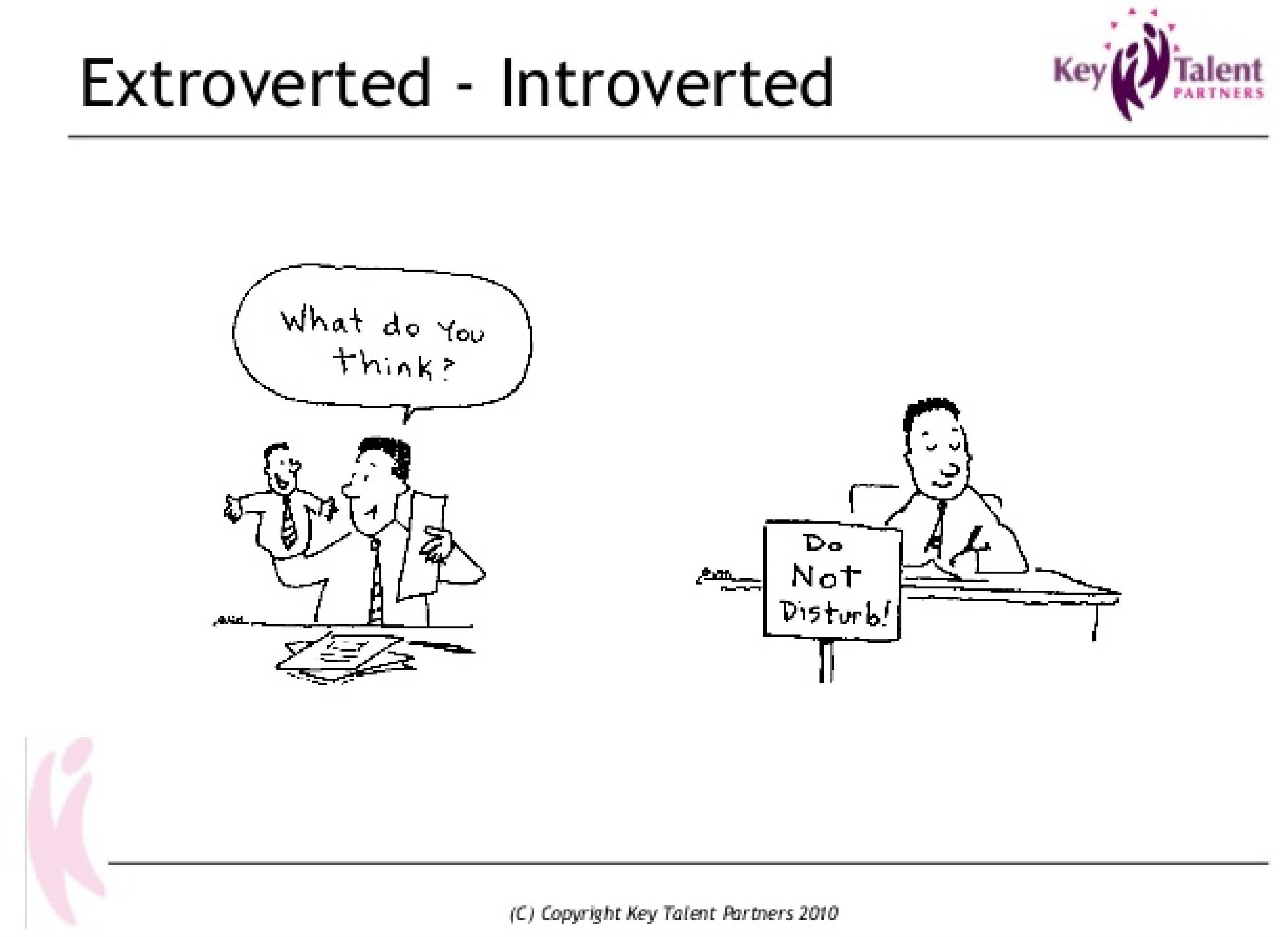
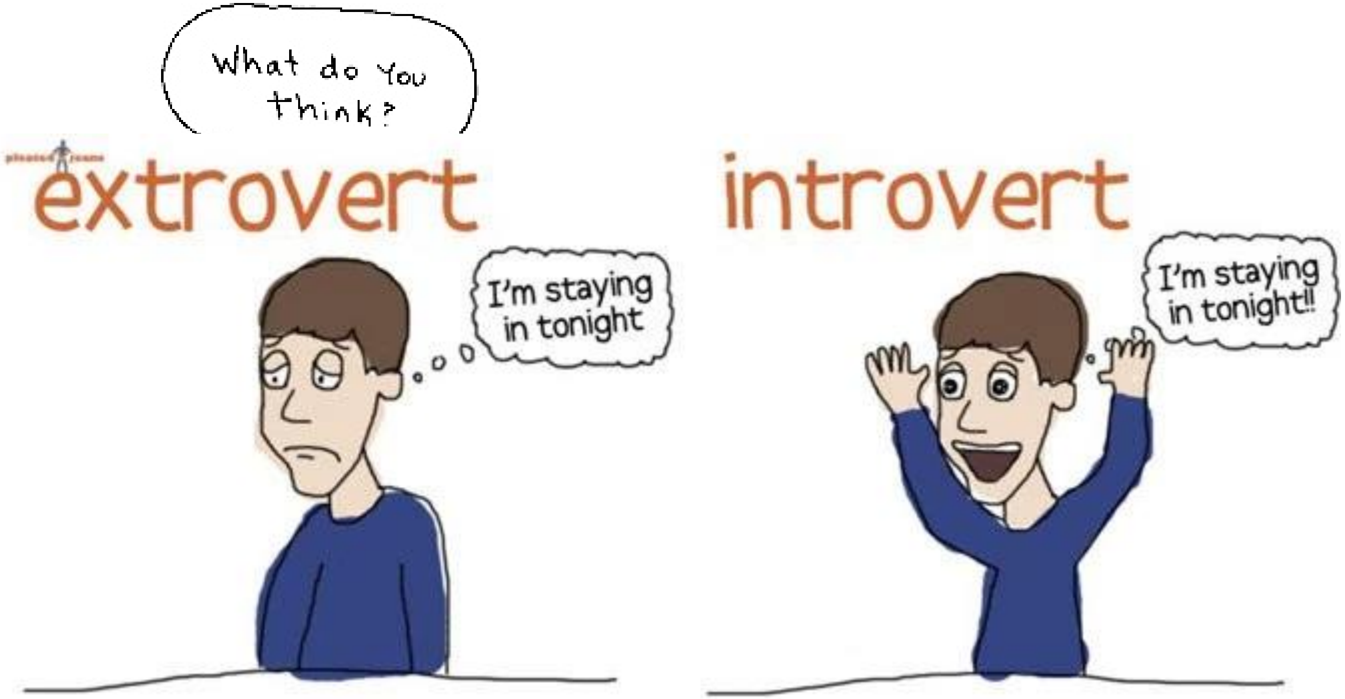


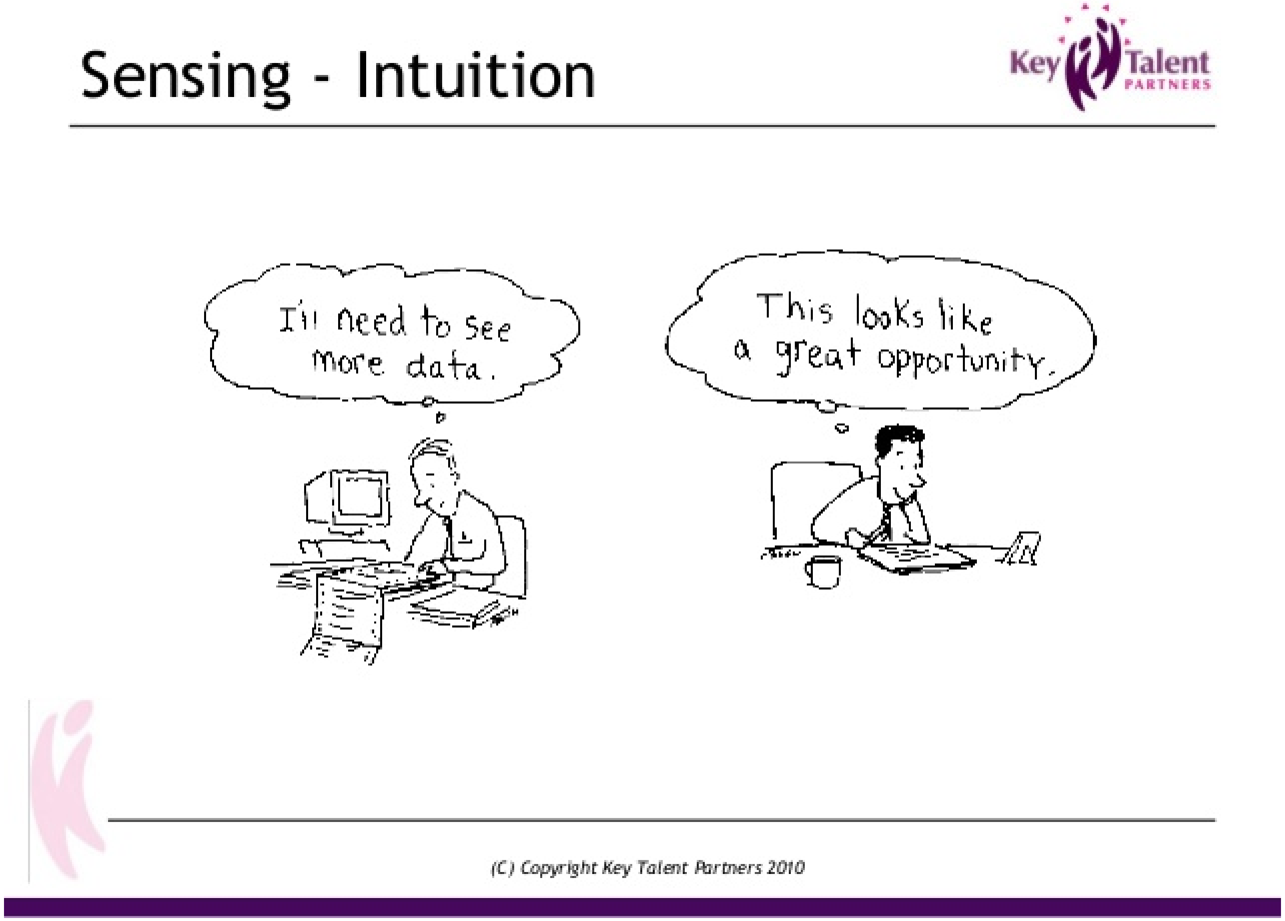
Extroverted - Introverted

What do You think?
Do Not Disturb!

(C) Copyright Key Talent Partners 2010

Extroverted - Introverted


What do You think?
extrovert
I'm staying in tonight
introvert
I'm staying in tonight!!

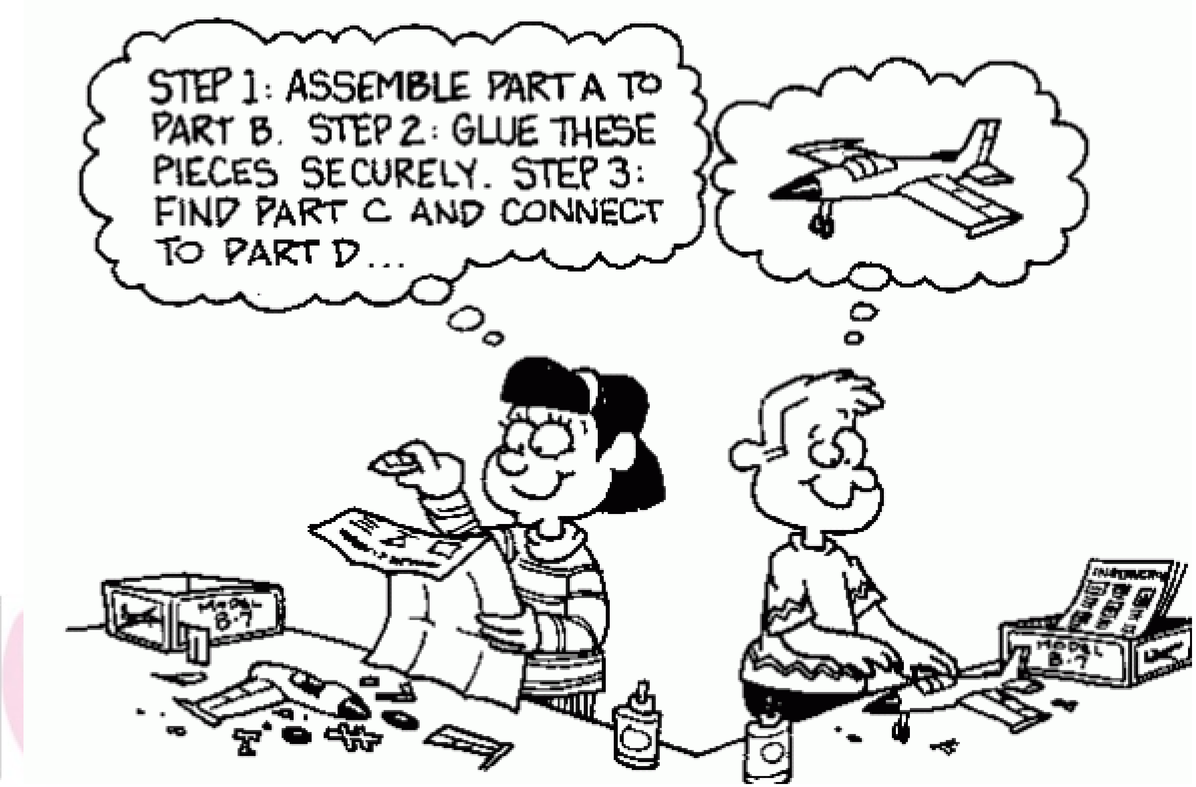


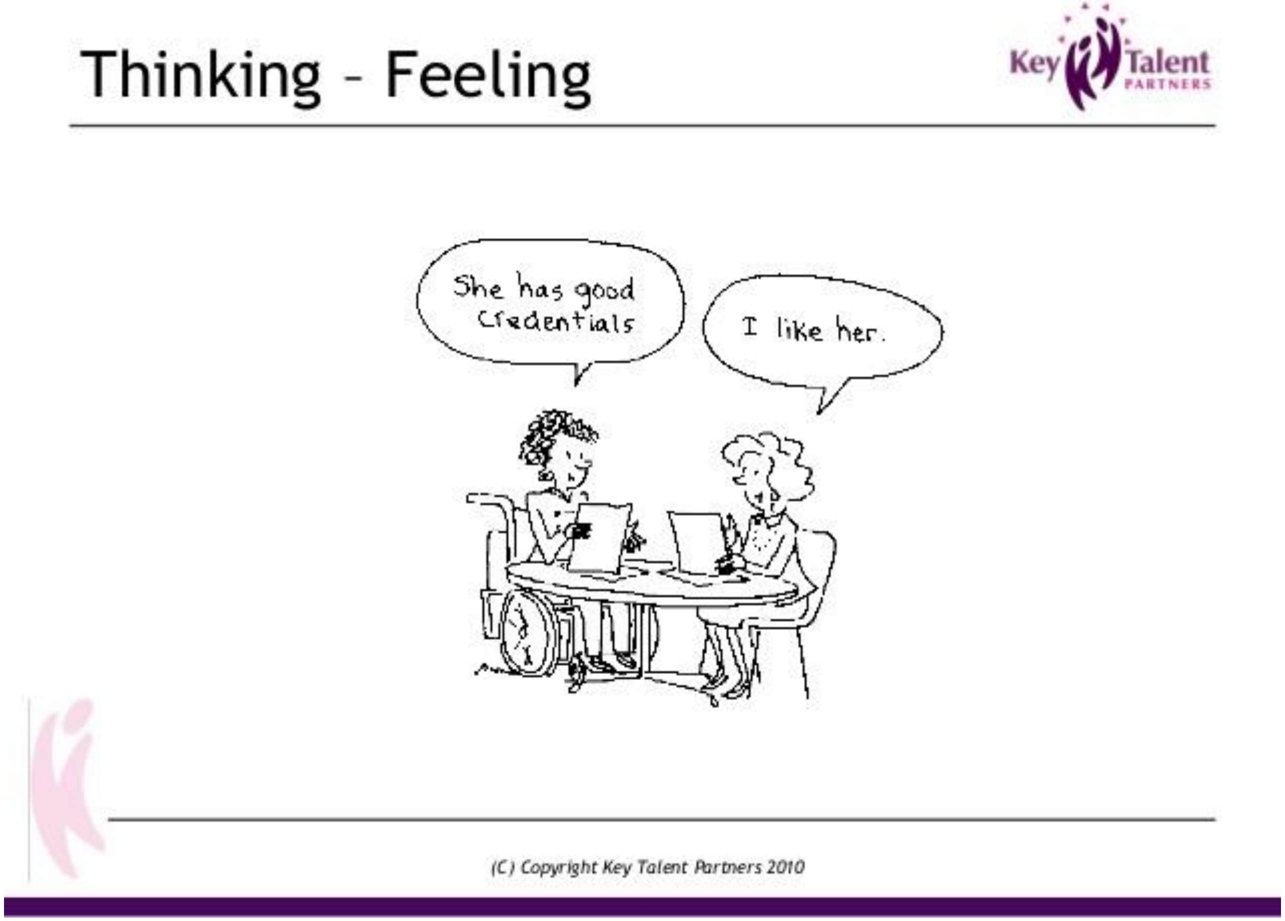
Sensing - Intuition

I'll need to see more data.
This looks like a great opportunity.

(C) Copyright Key Talent Partners 2010

Sensing - Intuition


STEP 1: ASSEMBLE PART A TO PART B. STEP 2: GLUE THESE PIECES SECURELY. STEP 3: FIND PART C AND CONNECT TO PART D...
MODEL B-7
MODEL B-7



Thinking - Feeling

Key Talent PARTNERS
She has good credentials
I like her.

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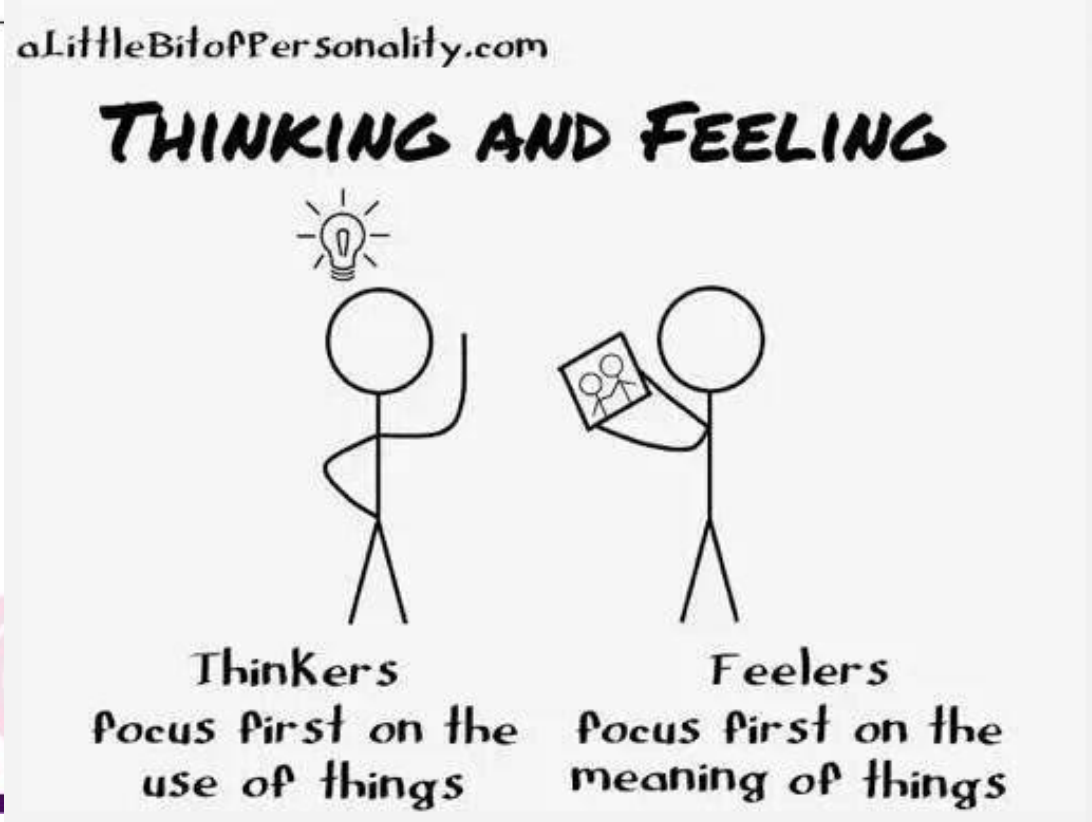
Thinking - Feeling



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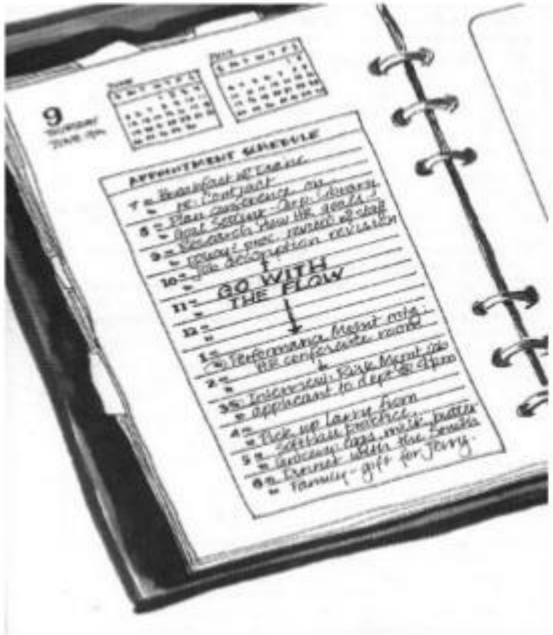
THINKING AND FEELING

Thinkers
focus first on the use of things

Feelers
focus first on the meaning of things

Judging - Perceiving


9
APPOINTMENT SCHEDULE
7
8
9
10
GO WITH
THE FLOW
11
12
1 Performance Mgmt mtg.
HR conference room
2 Interview: Rick Mgmt job
3 applicant to dept @ 4pm
4 Pick up Larry from
softball practice
Groceries: eggs, milk, butter
5 Dinner with the Smiths
6 Family - gift for Jerry

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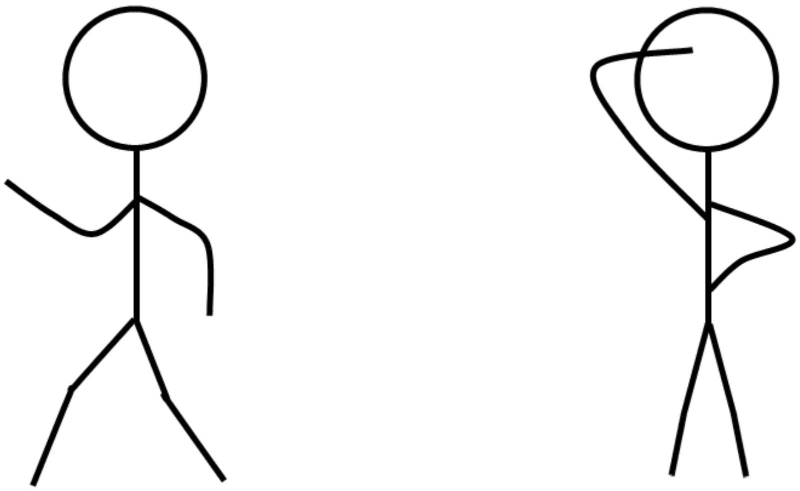
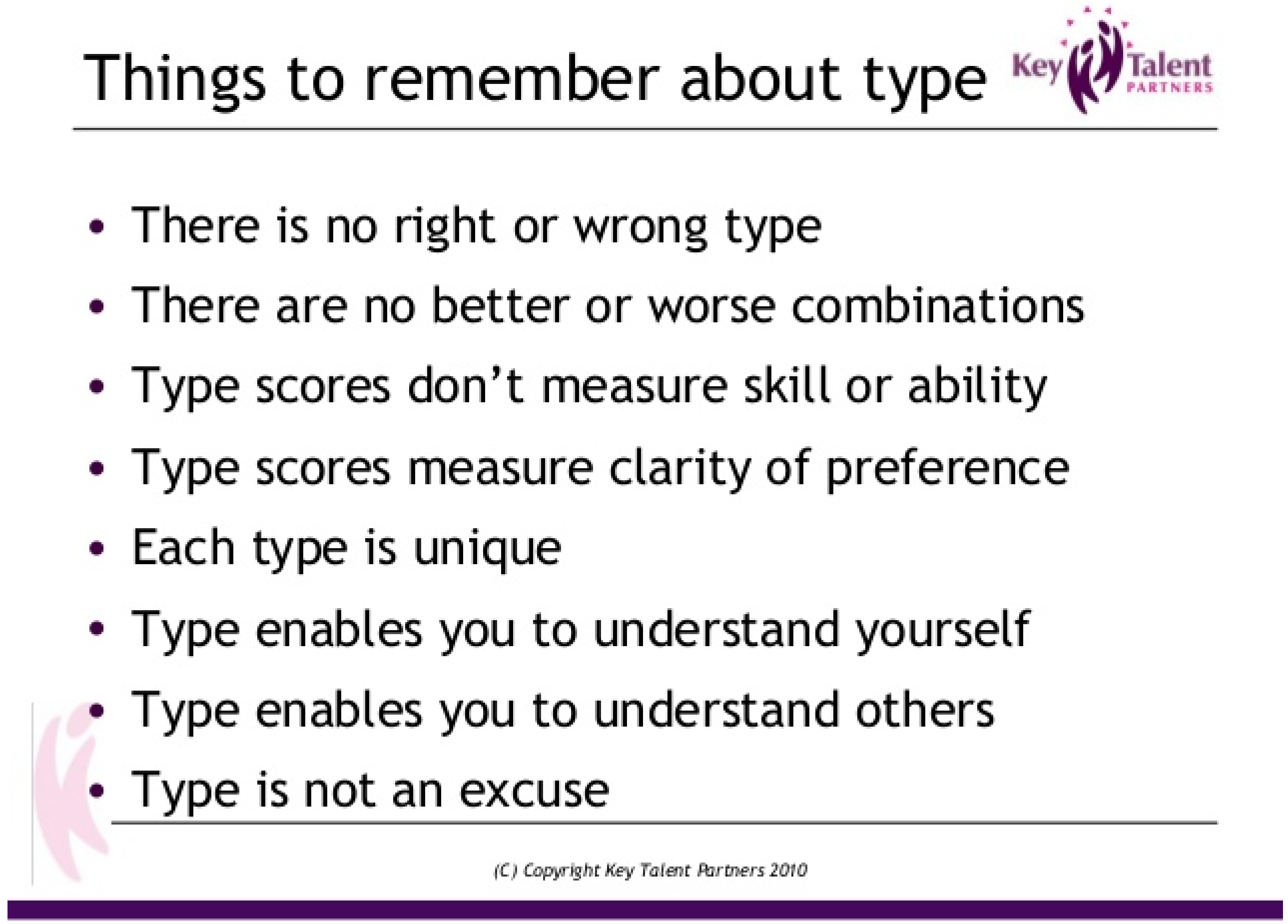
JUDGERS AND PERCEIVERS



Judgers
like to plan
and act first

Perceivers
like to explore
and respond



Things to remember about type

- There is no right or wrong type
- There are no better or worse combinations
- Type scores don’t measure skill or ability
- Type scores measure clarity of preference
- Each type is unique
- Type enables you to understand yourself
- Type enables you to understand others
- Type is not an excuse

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IS Developers vs General Population

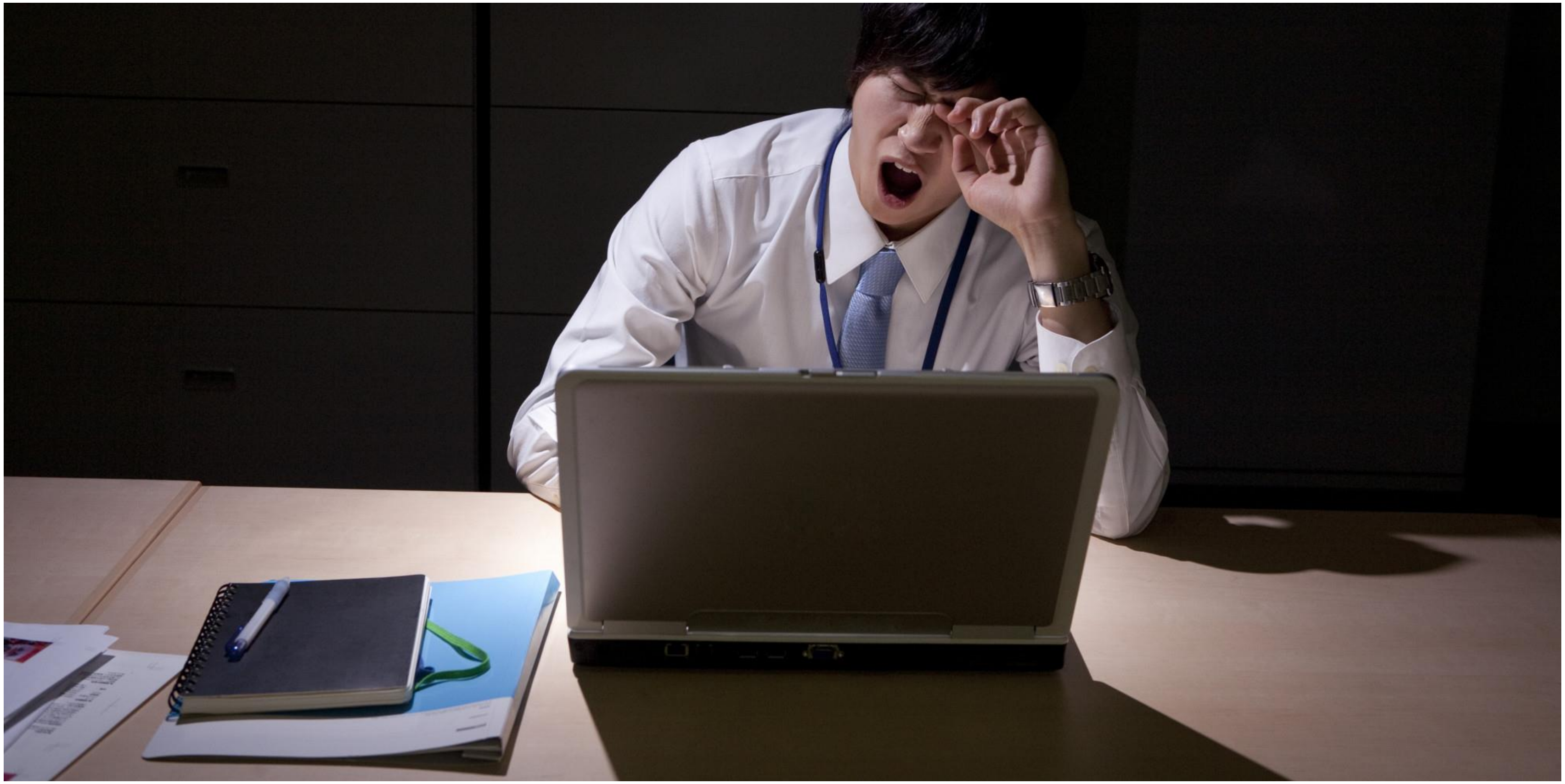
Type	IS developer	General population
J (judge)	Slightly more than half	Slightly more than half
I (introvert)	75%	25%
T (thinking)	80%	50%
N (intuition)	55%	25%
NT	N/A	7%

Two situations:

1. PM is a strong N and one member is a strong S
2. All members are strong I

Reward and Recognition Systems

- Team-based
- Bonuses, trips, … to workers that meet or exceed company or project goals



Reward and Recognition Systems

- Team-based
- Bonuses, trips, … to workers that meet or exceed company or project goals
- **Recognize and reward people who willingly work overtime to meet an aggressive schedule objective or help a teammate**
- **Not reward people who work overtime just to get extra pay or because of their own poor work or planning**

Indicators of a Team’s Effectiveness

- Improvements in skills that allow individuals to perform assignments more effectively
- Improvements in competencies that help team members perform better as a team
- Reduced staff turnover rate
- Increased team cohesiveness where team members share information and experiences openly and help each other to improve the overall project performance

Contents

- Why?
- What is resource management?
- Plan Resource Management
- Estimate Activity Resources
- Acquire Resources
- Develop Team
- Manage Team
- Control Resources
- Key concepts of managing people
- Software

Manage Team

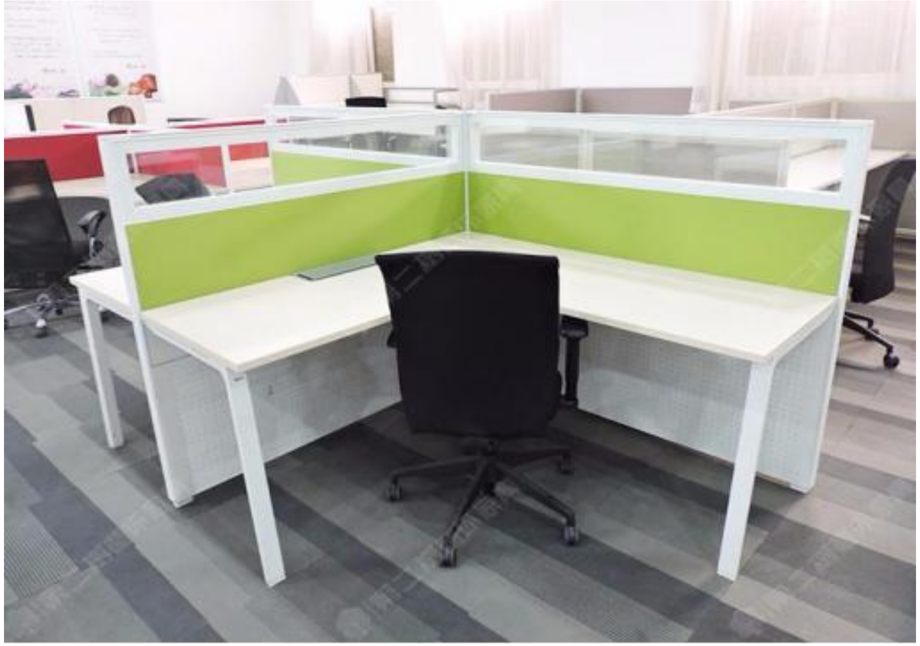
The process of tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance.

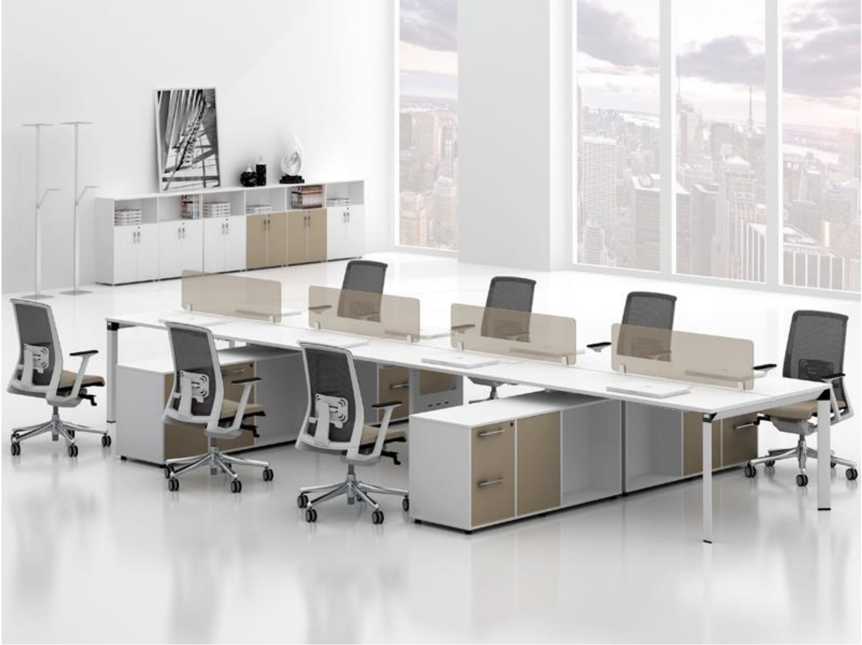
Inputs	Tools & Techniques	Outputs
1. Project management plan 2. Project documents 3. Work performance reports 4. Team performance assessments 5. Enterprise environmental factors 6. Organizational process assets	1. Interpersonal and team skills 2. Project management information system	1. Change requests 2. Project management plan updates 3. Project documents updates 4. Enterprise environmental factors updates

Tools and Techniques

- Observation & conversation – “management by walking around”
- Project performance appraisals – many reasons for sloppy or late work
- Interpersonal skills – leadership, influencing, and decision-making
- Conflict management

Which one is better?





Conflict Management

Are all conflicts bad?

Conflict Management

- Sources of conflict include scarce resources, scheduling priorities, and personal work styles.
- Successful conflict management results in greater productivity and positive working relationships

Factors that Influence Conflict Resolution

- Importance and intensity of the conflict
- Time pressure for resolving the conflict
- Relative power of the people involved in the conflict
- Importance of maintaining a good relationship, and
- Motivation to resolve conflict on a longer-term or short-term basis

“Blake and Mouton” Handling Conflicts

Relationship Importance

	Low	Medium	High
High	**Smoothing/ Accommodating**		**Confrontation/ Problem-solving** **Collaborating**
Medium		**Compromise**	
Low	**Withdraw/ Avoidance**		**Forcing**

Task Importance

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Five Dysfunctions of Teams (Patrick Lencioni)

Dysfunction	Solution
Absence of **trust**	MBTI test, Outward bound
Fear of **conflict**	Practice unfiltered, passionate debate about important issues
Lack of **commitment**	Stress the importance of expressing all possible ideas and getting people to agree to disagree, then having them to commit
Avoidance of **accountability**	Clarify and focus on everyone’s top priorities
Inattention to **results**	Scoreboard

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Additional Suggestions

- Be patient and kind
- Fix the problem, not blaming people
- Establish regular, effective meetings
- Small team: 3-7 members
- Allow time for team to develop
  - Plan social activities to get to know each other
  - Stress team identity
  - Nurture team members
  - Celebrate achievements
- Take additional actions to work with virtual team members

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Control Resources

The process of ensuring that the physical resources assigned and allocated to the project are available as planned, as well as monitoring the planned versus actual

Inputs	Tools & Techniques	Outputs
1. Project management plan 2. Project documents 3. Work performance reports 4. Agreements 5. Organizational process assets	1. Data analysis 2. Problem solving 3. Interpersonal and team skills 4. Project management information system	1. Work performance information 2. Change requests 3. Project management plan updates 4. Project documents updates

Control Resources

- Should be performed continuously in all project phases and throughout the project life cycle
- The resources needed for the project should be **assigned** and **released** at the right time, right place, and right amount for the project to continue without delays

Update Resource Allocation

- Monitoring resource expenditures
- Identifying and dealing with resource shortage/surplus in a timely manner
- Ensuring that resources are used and released according to the plan and project needs
- Informing appropriate stakeholders if any issues arise with relevant resources
- Influencing the factors that can create resources utilization change, and
- Managing the actual changes as they occur

Problem Solving

- Identify the problem. Specify the problem
- Define the problem. Break it into smaller, manageable problems
- Investigate. Collect data
- Analyze. Find the root cause of the problem
- Solve. Choose the suitable solution from a variety of available ones
- Check the solution. Determine if the problem has been fixed

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Four Categories

1. Motivation theories
2. Influencing workers and reducing conflict
3. The effect of power on project teams
4. How people and teams can become more effective

Question

- What motivates people?
- Why they do what they do?
- Why do some people require no external incentive whatsoever to produce high-quality work while others require significant external incentives to perform routine tasks?

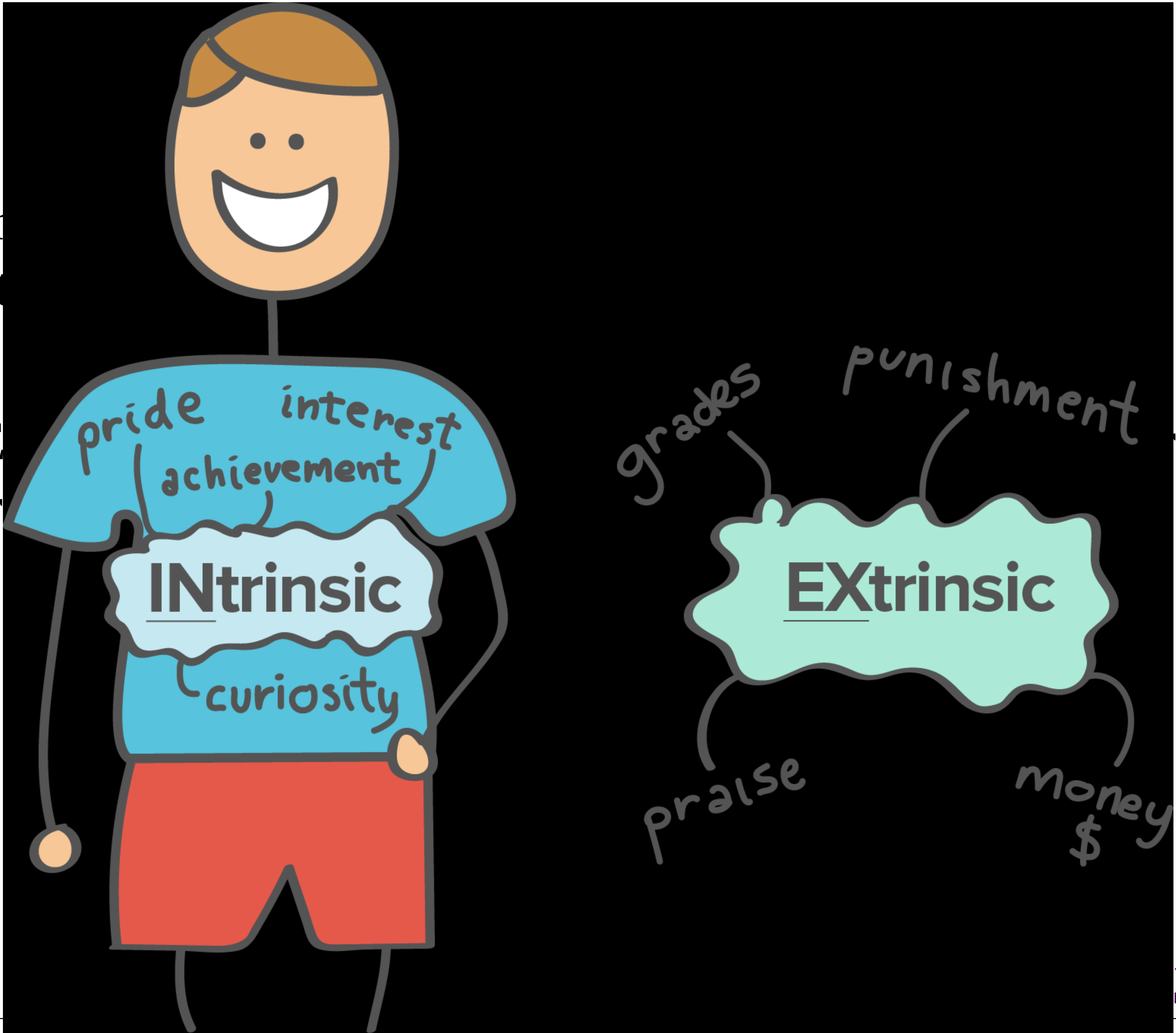
Motivation

- Intrinsic motivation causes people to participate in an activity for their own enjoyment

- Extrinsic motivation causes people to do something for a reward or to avoid a penalty

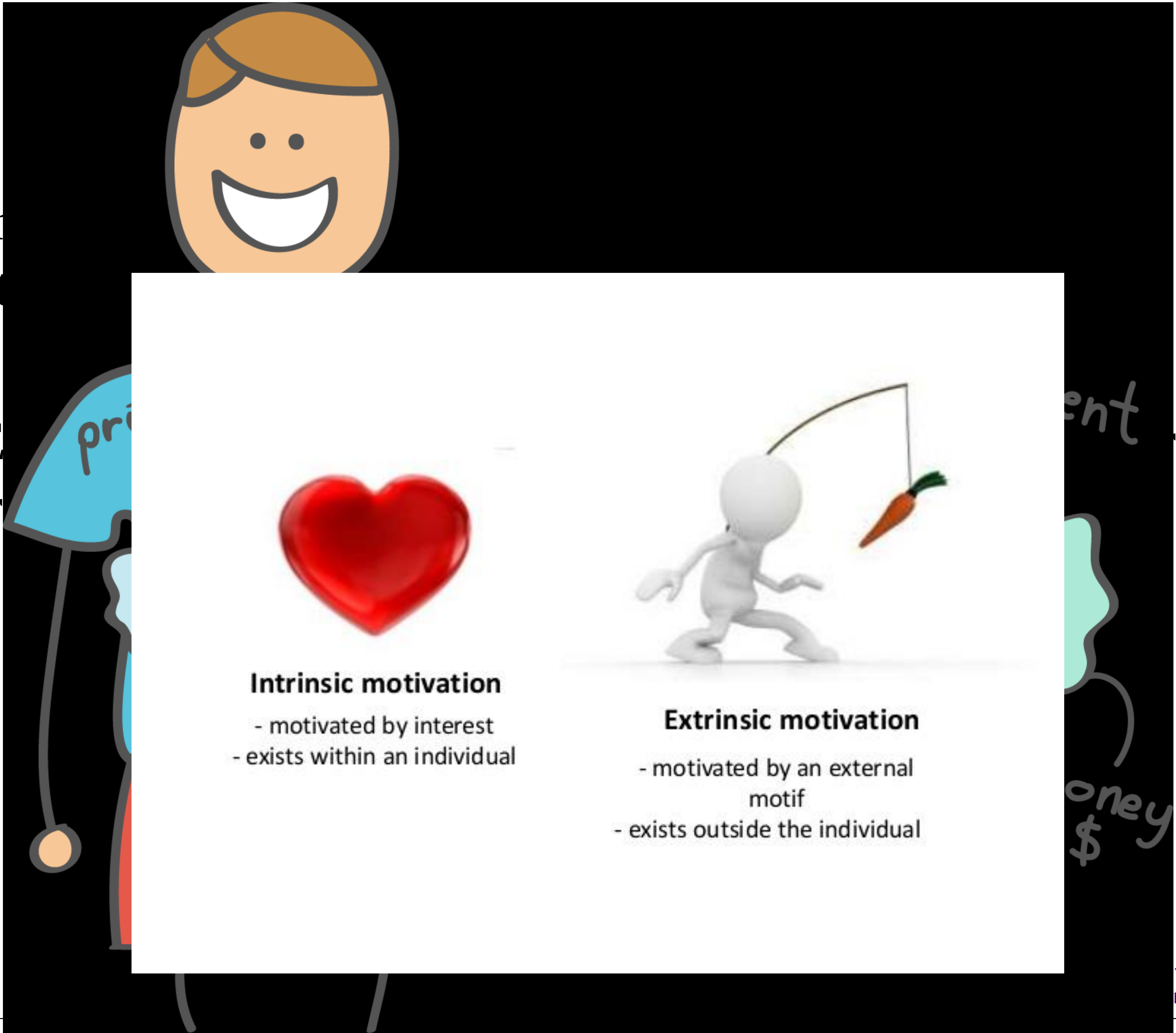
- In
act

- E
a r


pride
interest
achievement
INtrinsic
curiosity
grades
punishment
EXtrinsic
praise
money
$

- In
act

- E
a r



Intrinsic motivation

- motivated by interest
- exists within an individual

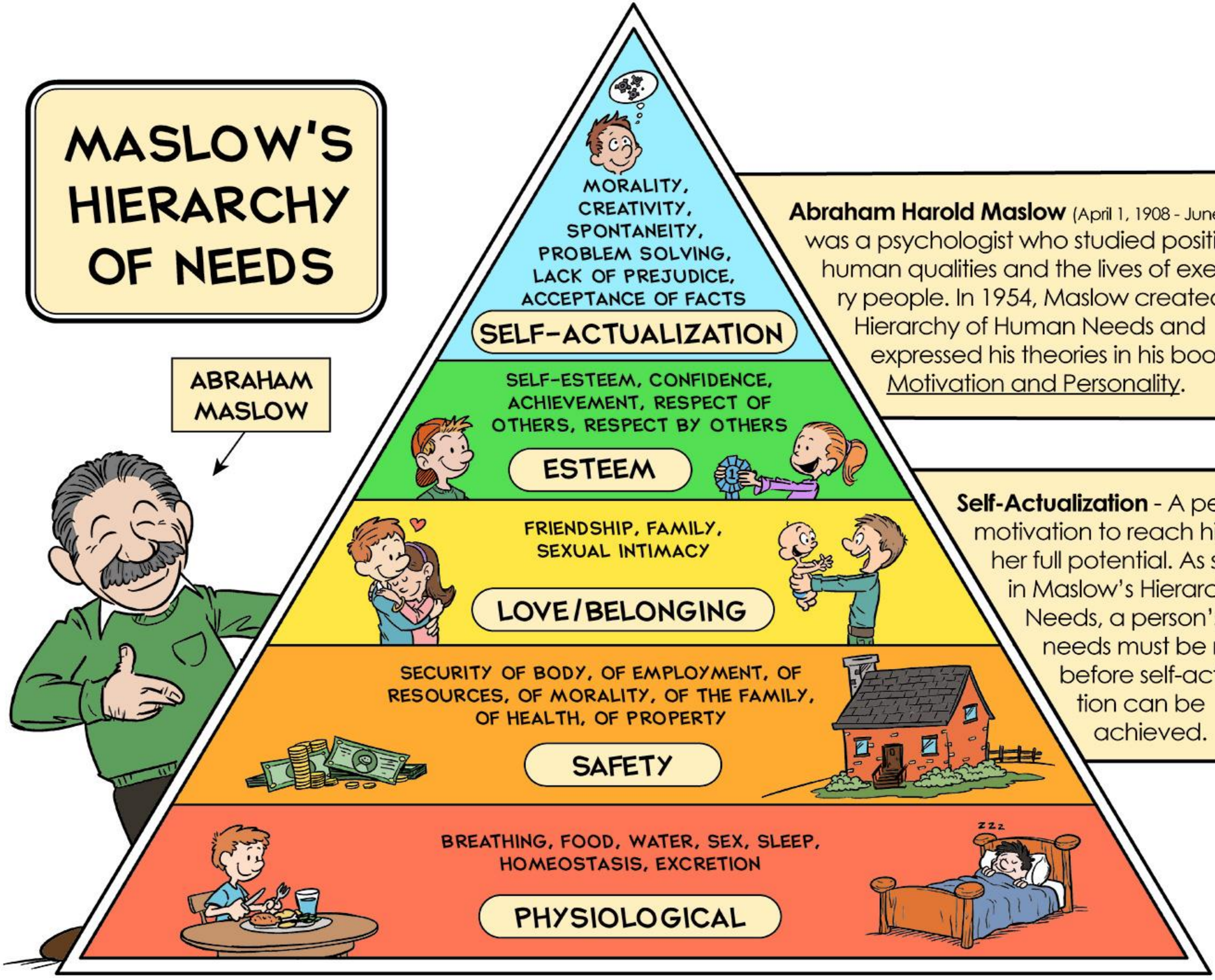
Extrinsic motivation

- motivated by an external motif
- exists outside the individual

Motivation Theories

- Maslow’s Hierarchy of Needs
- Herzberg’s Motivation-Hygiene Theory
- McClelland’s Acquired-Needs Theory
- McGregor’s Theory X and Theory Y

MASLOW'S HIERARCHY OF NEEDS


ABRAHAM MASLOW
MORALITY, CREATIVITY, SPONTANEITY, PROBLEM SOLVING, LACK OF PREJUDICE, ACCEPTANCE OF FACTS
SELF-ACTUALIZATION
SELF-ESTEEM, CONFIDENCE, ACHIEVEMENT, RESPECT OF OTHERS, RESPECT BY OTHERS
ESTEEM
FRIENDSHIP, FAMILY, SEXUAL INTIMACY
LOVE/BELONGING
SECURITY OF BODY, OF EMPLOYMENT, OF RESOURCES, OF MORALITY, OF THE FAMILY, OF HEALTH, OF PROPERTY
SAFETY
BREATHING, FOOD, WATER, SEX, SLEEP, HOMEOSTASIS, EXCRETION
PHYSIOLOGICAL
ZZZ

Abraham Harold Maslow (April 1, 1908 - June 8, 1970) was a psychologist who studied positive human qualities and the lives of exemplary people. In 1954, Maslow created the Hierarchy of Human Needs and expressed his theories in his book, Motivation and Personality.

Self-Actualization - A person's motivation to reach his or her full potential. As shown in Maslow's Hierarchy of Needs, a person's basic needs must be met before self-actualization can be achieved.

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Maslow's Hierarchy of Needs(1950s)

Maslow's hierarchy conveys a message of **hope** and **growth**. People can work to control their own destinies and naturally strive to satisfy higher needs.

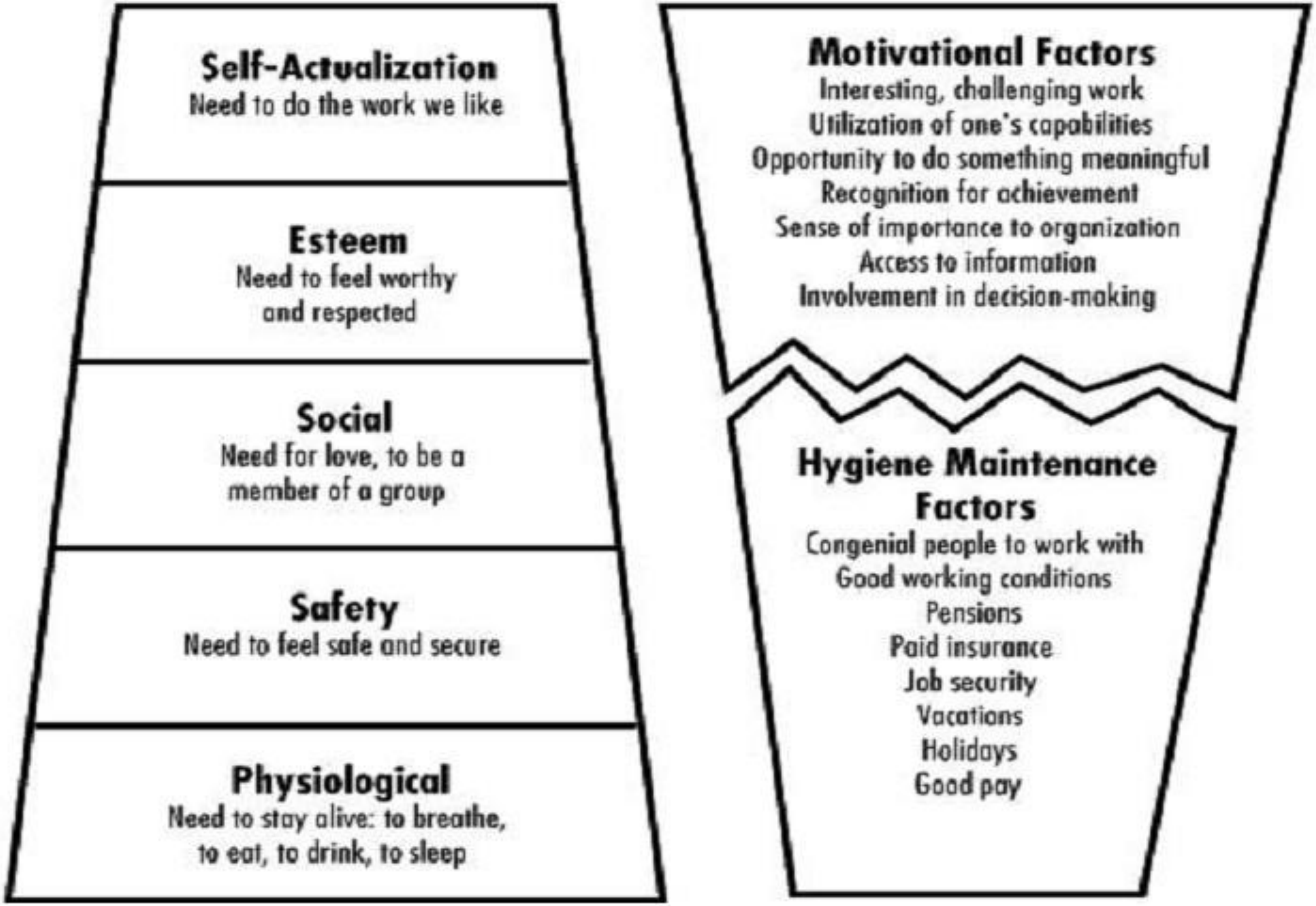
Successful project managers know they must focus on meeting project goals, but they also must understand team members' personal goals and needs to provide appropriate motivation and maximize team performance.

A satisfied need is no longer a motivator

Frederick Herzberg’s Motivation-Hygiene Theory(1966)

- **Motivational factors**: satisfaction
- **Hygiene factors**: dissatisfaction, maintenance factors necessary to avoid dissatisfaction

Hygiene Factors	Motivators
Larger salaries	Achievement
More supervision	Recognition
More attractive work environment	Work itself
Computer or other required equipment	Responsibility
Health benefits	Advancement
Training	Growth



Maslow's Hierarchy of Needs

Self-Actualization
Need to do the work we like

Esteem
Need to feel worthy and respected

Social
Need for love, to be a member of a group

Safety
Need to feel safe and secure

Physiological
Need to stay alive: to breathe, to eat, to drink, to sleep

Herzberg's Motivation Hygiene Theory

Motivational Factors
Interesting, challenging work
Utilization of one's capabilities
Opportunity to do something meaningful
Recognition for achievement
Sense of importance to organization
Access to information
Involvement in decision-making

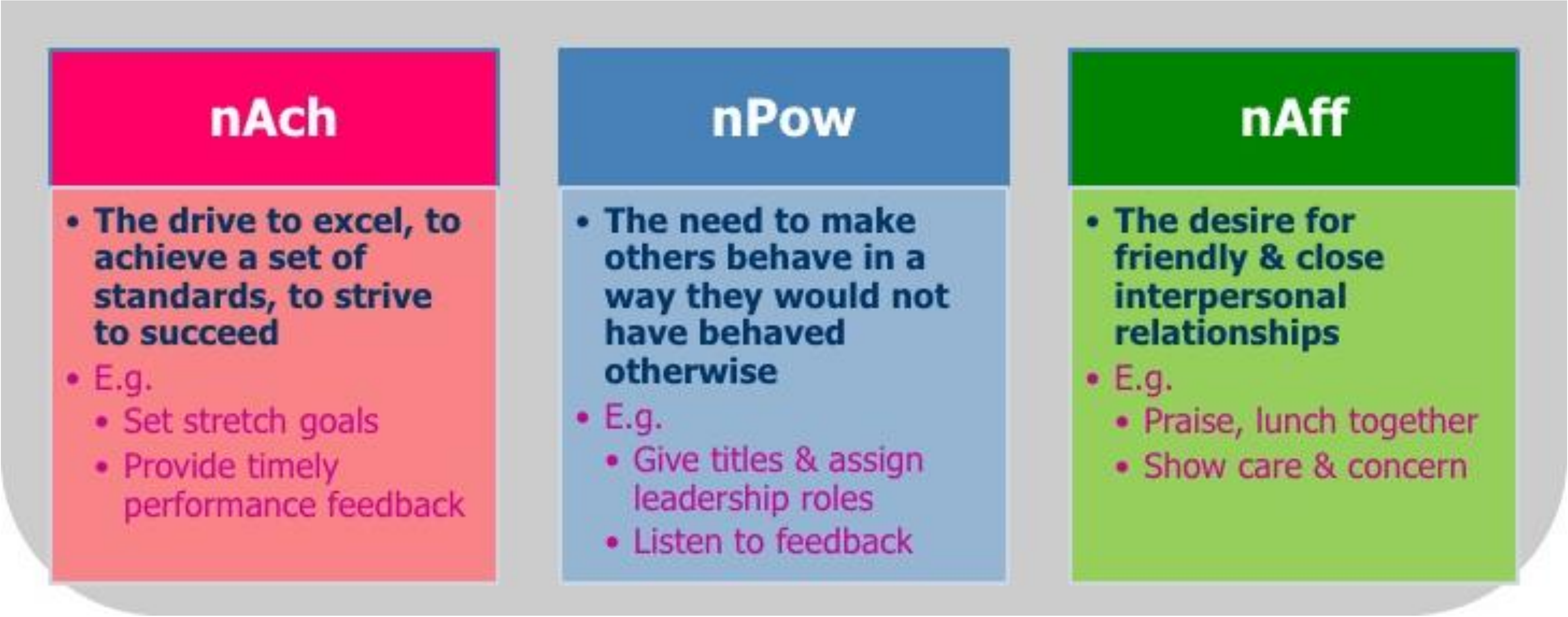
Hygiene Maintenance Factors
Congenial people to work with
Good working conditions
Pensions
Paid insurance
Job security
Vacations
Holidays
Good pay

McClelland’s Acquired-Needs Theory

An individual’s specific needs are acquired or learned over time and shaped by life experiences.

- Achievement (nAch): seek to excel, need regular feedback, prefer to work alone or work with high achievers
- Power (nPow): desire personal power or institutional power, want to direct others
- Affiliation (nAff): desire harmonious relationship, need to feel accepted, conform to norms of group

McClelland’s Acquired-Needs Theory



nAch

- **The drive to excel, to achieve a set of standards, to strive to succeed**
- E.g.
  - Set stretch goals
  - Provide timely performance feedback

nPow

- **The need to make others behave in a way they would not have behaved otherwise**
- E.g.
  - Give titles & assign leadership roles
  - Listen to feedback

nAff

- **The desire for friendly & close interpersonal relationships**
- E.g.
  - Praise, lunch together
  - Show care & concern

Theory X and Theory Y (Douglas McGregor)

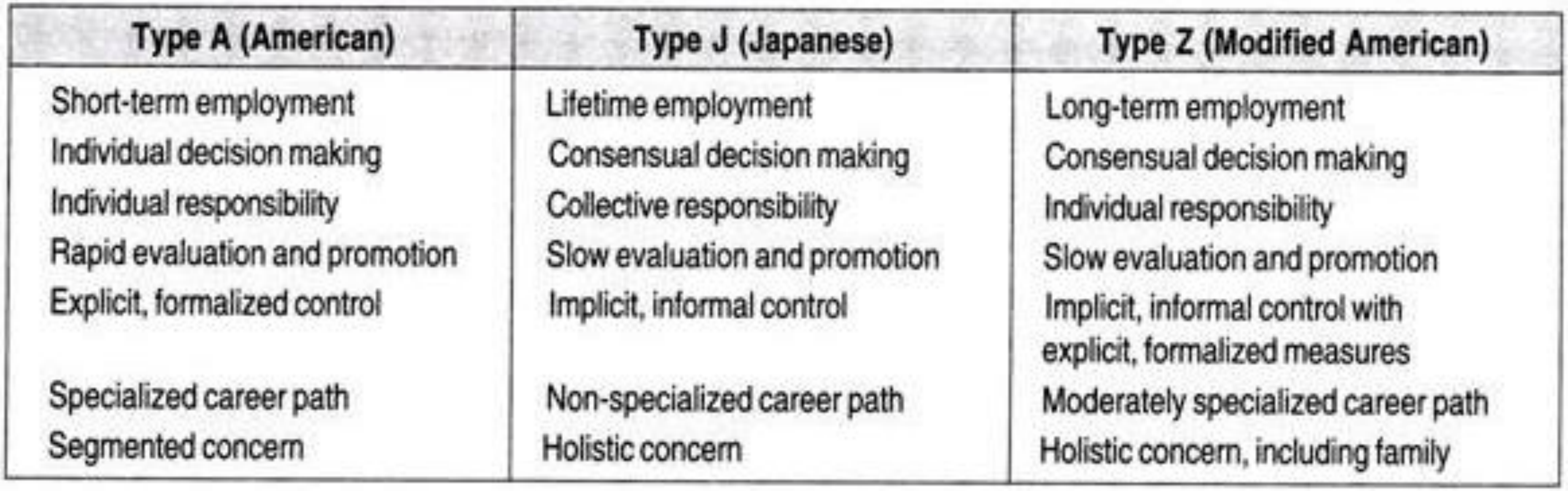
Theory X

The assumption that employees dislike work, are lazy, dislike responsibility, and must be coerced to perform.

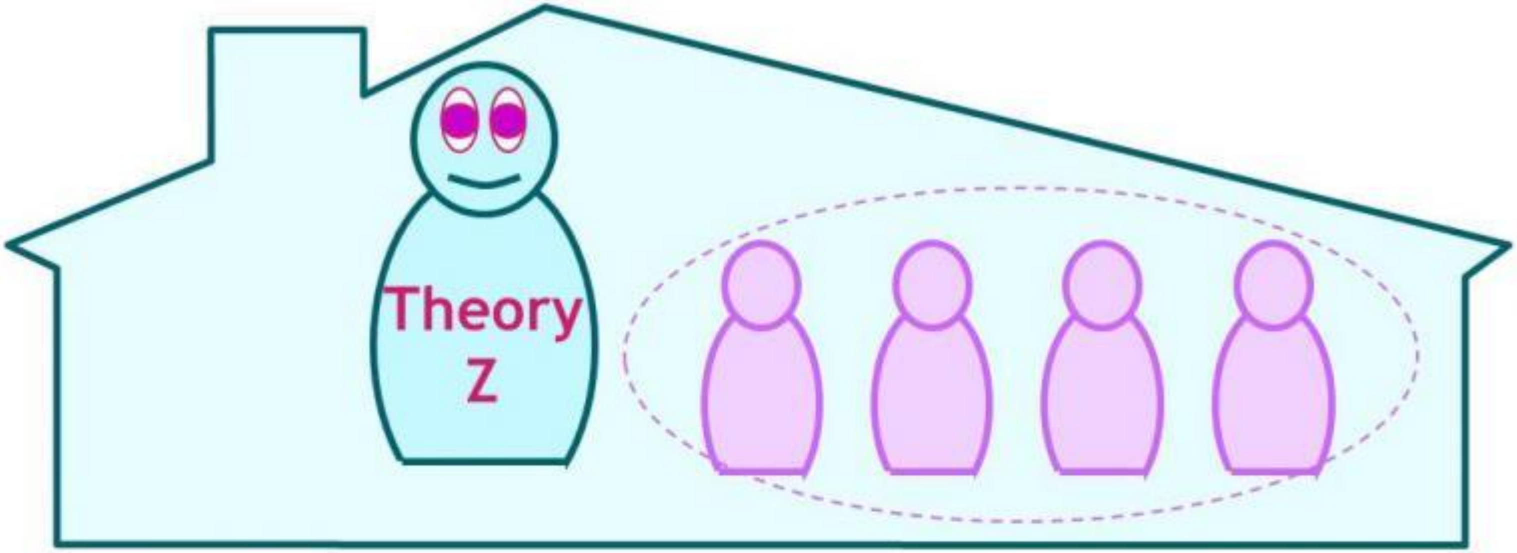
Theory Y

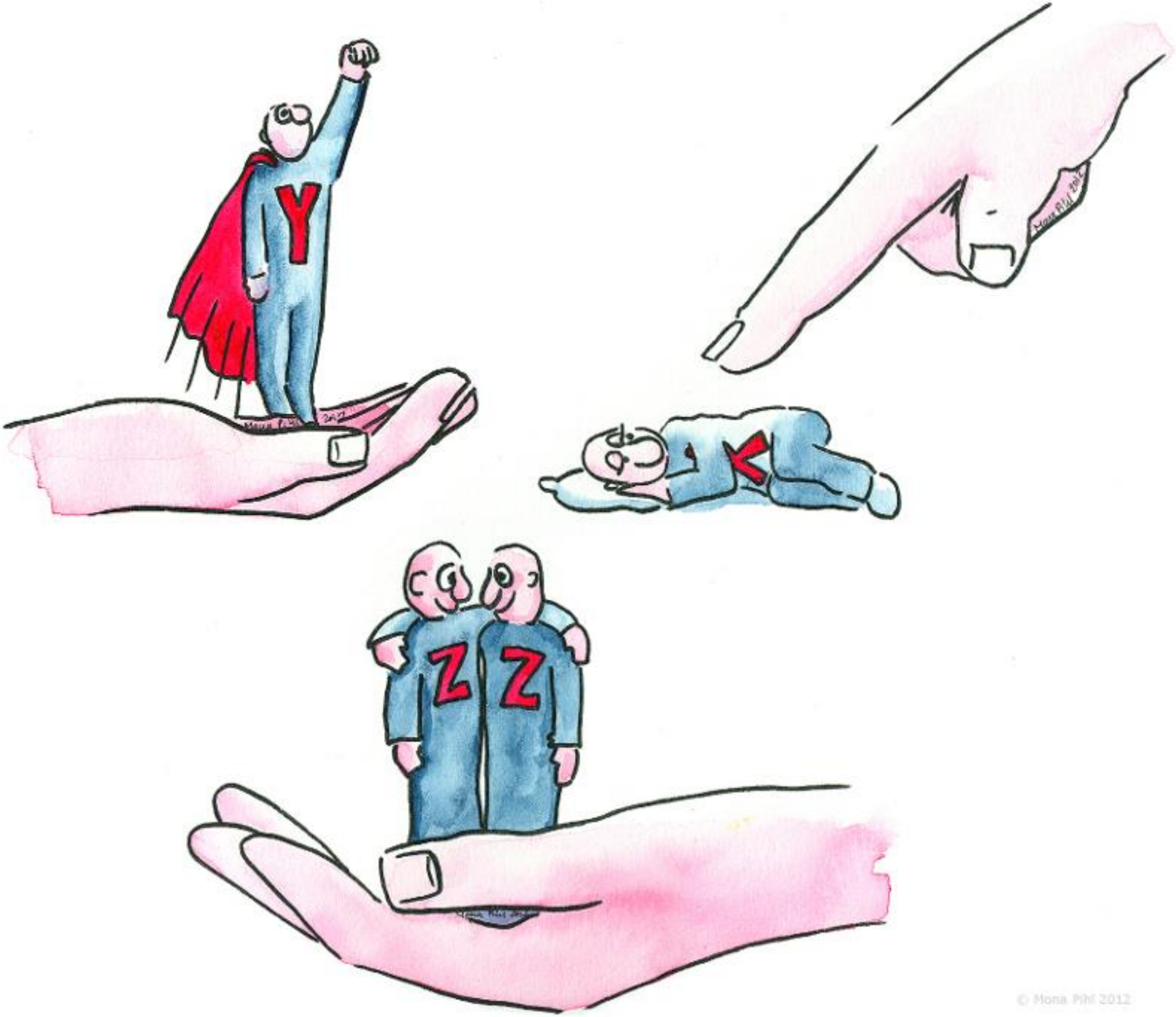
The assumption that employees like work, are creative, seek responsibility, and can exercise self-direction.

Theory Z, by William Ouchi



Type A (American)	Type J (Japanese)	Type Z (Modified American)
Short-term employment	Lifetime employment	Long-term employment
Individual decision making	Consensual decision making	Consensual decision making
Individual responsibility	Collective responsibility	Individual responsibility
Rapid evaluation and promotion	Slow evaluation and promotion	Slow evaluation and promotion
Explicit, formalized control	Implicit, informal control	Implicit, informal control with explicit, formalized measures
Specialized career path	Non-specialized career path	Moderately specialized career path
Segmented concern	Holistic concern	Holistic concern, including family





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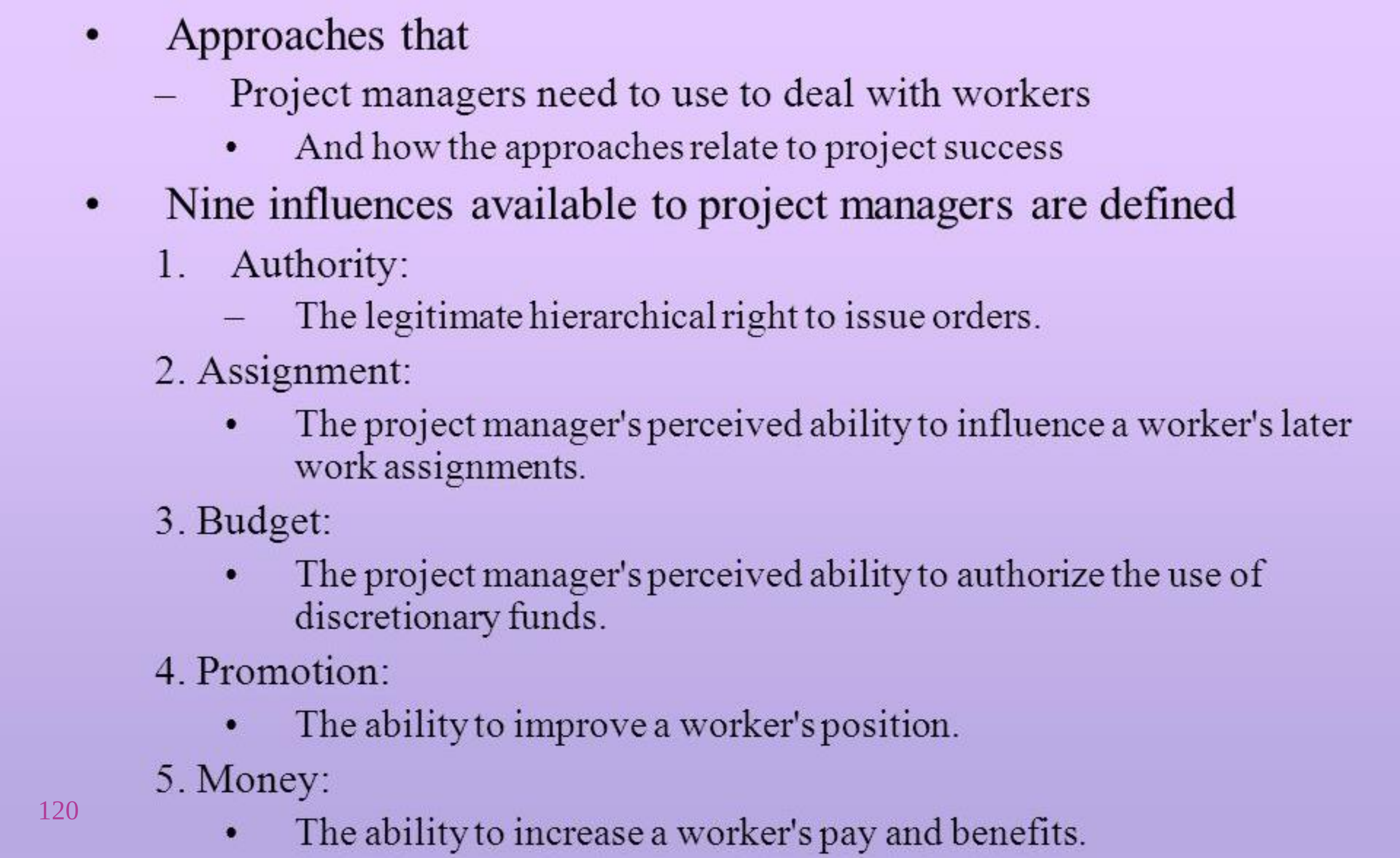
Influencing Workers and Reducing Conflict

- **Thamhain and Wilemon’s Influence and Power**
  - Many people working a project do not report directly to project managers
  - Project managers often do not have control over project staff who report to them

1. Authority
2. Assignment
3. Budget
4. Promotion
5. Money
6. Penalty
7. Work challenge
8. Expertise
9. Friendship

Thamhain and Wilemon’s Influence



- Approaches that
  - Project managers need to use to deal with workers
    - And how the approaches relate to project success
- Nine influences available to project managers are defined

1. Authority:
   - The legitimate hierarchical right to issue orders.
2. Assignment:
   - The project manager's perceived ability to influence a worker's later work assignments.
3. Budget:
   - The project manager's perceived ability to authorize the use of discretionary funds.
4. Promotion:
   - The ability to improve a worker's position.
5. Money:
   - The ability to increase a worker's pay and benefits.

Thamhain and Wilemon’s Influence

6. Penalty:
   - The project manager's ability to cause punishment.
7. Work challenge:
   - The ability to assign work
     - that capitalizes on a worker's enjoyment of doing a particular task.
8. Expertise:
   - The project manager's perceived special knowledge
     - that others deem important.
9. Friendship:
   - The ability to establish friendly personal relationships
     - between the project manager and others.

The Effect of Power on Project Teams

Power is the potential ability to influence behavior to get people to do things they would not otherwise do. “The base of social power” by French and Raven.

1. Coercive power: using punishment, threats, or other negative approaches to get people do things they do not want to do.
2. Reward power: using incentives to induce people to do things.
3. Referent power: based on an individual’s personal charisma.
4. Legitimate power: getting people to do things based on a position of authority.
5. Expert power: using personal knowledge and expertise to get people to change their behavior.

How People and Teams Can Become More Effective

Stephen Covey's *7 Habits of Highly Effective People*

1. Be Proactive
2. Begin with the end in mind
3. Put first things first

help people achieve a private victory by becoming independent

4. Think win-win
5. Seek first to understand, then to be understood
6. Synergize

strive for interdependence

7. Sharpen the saw

Develop and renew their physical, spiritual, mental, social, and emotional selves

Tsinghua University

Motivation, Influence, Power & Effectiveness in Project Management

- Projects are done **by** and **for** people
- Everyone prefers to work with people they **like** and **respect**
- Treat other people with **respect**, regardless of their title or position, especially for people in support roles

Job Market Changes Rapidly

- Upgrade your skills to remain marketable and flexible
- Develop a support system and financial reserves to make it through difficult economic times
- Consider different types of jobs and industries where you can use your skills and earn a living
- Negotiation and presentation skills also become crucial in finding and keeping a good job
- Worker need to know how they personally contribute to an organization’s bottom line

- Human resources are very different from other resources. You cannot simply replace people in the same way that you replace a piece of equipment

- It is essential to treat people with consideration and respect, to understand what motivates them, and to communicate carefully with them

- What makes good project managers great is not their use of tools, but their ability to enable project team members to deliver their best work on a project

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Using Software to Assist Resource Management

By defining and assigning resources in MS Project, you can:

- Keep track of resources through stored information and reports on resource assignments
- Identify potential resource shortages
- Identify underutilized resources and reassign them
- Use automated leveling to make level resources easier to manage

Thanks!