

Project Human Resource Management

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Contents

- Define project human resource management and understand its processes
- Summarize key concepts for managing people
- Discuss human resource planning



The Importance of Human Resource Management

- Many corporate executives have said, “People are our most important asset”
- People determine the success and failure of organizations and projects



What is Project Human Resource Management (PMBOK)?

- Making the most effective use of the people involved with a project
- Processes include:
 - Human resource planning: identifying and documenting project roles, responsibilities, and reporting relationships
 - Acquiring the project team: getting the needed personnel assigned to and working on the project
 - Developing the project team: building individual and group skills to enhance project performance
 - Managing the project team: tracking team member performance, motivating team members, providing timely feedback, resolving issues and conflicts, and coordinating changes to help enhance project performance

Project Human Resource Management Summary

Planning

Process: **Human Resource Planning**

Outputs: Roles and responsibilities, project organizational chart, staffing management plan



Executing

Process: **Acquire Project Team**

Outputs: Project staff assignments, resource availability, updates to the staffing management plan

Process: **Develop Project Team**

Outputs: Team performance assessment



Monitoring and Controlling

Process: **Manage Project Team**

Outputs: Requested changes, recommended corrective actions, recommended preventive actions, and updates to organizational process assets and the project management plan

Project Start

Project Finish





Keys to Managing People

- Psychologists and management theorists have devoted much research and thought to the field of managing people at work
- Important areas related to project management include:
 - Motivation theories
 - Influence and power
 - Effectiveness

Theory of Personality

- Jung's Attitudes of the Mind

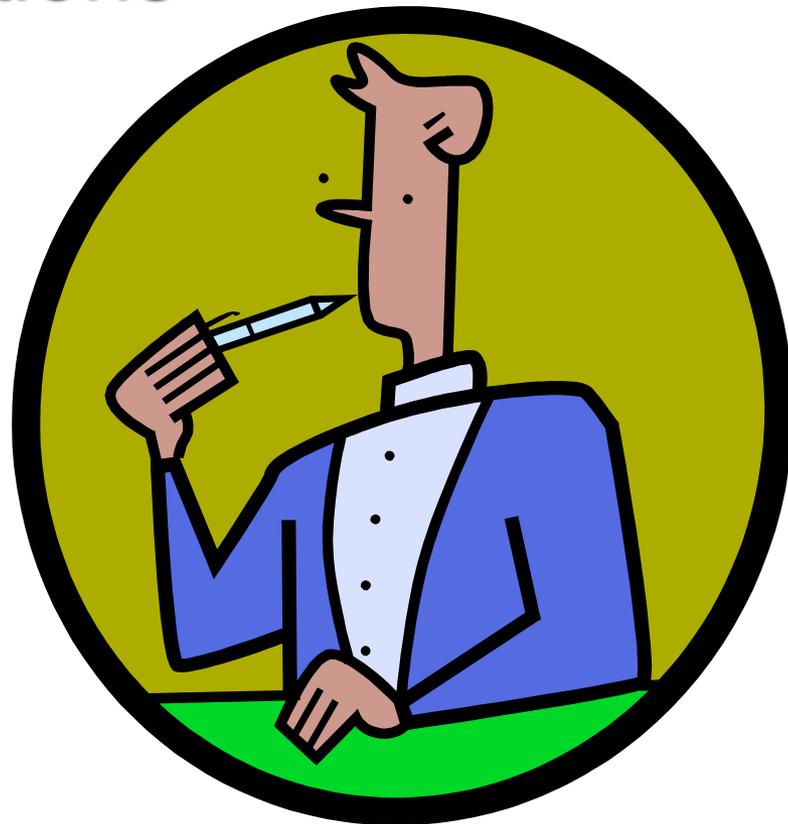
- Exists in each person one is more dominant than other in each person
- **Extroversion (extrovert)**– direct psychic energy towards the things in external world
- **Introversion (introvert)** – direct psychic energy more inwardly focused



Interpretation: Cognitive Style Self-Assessment

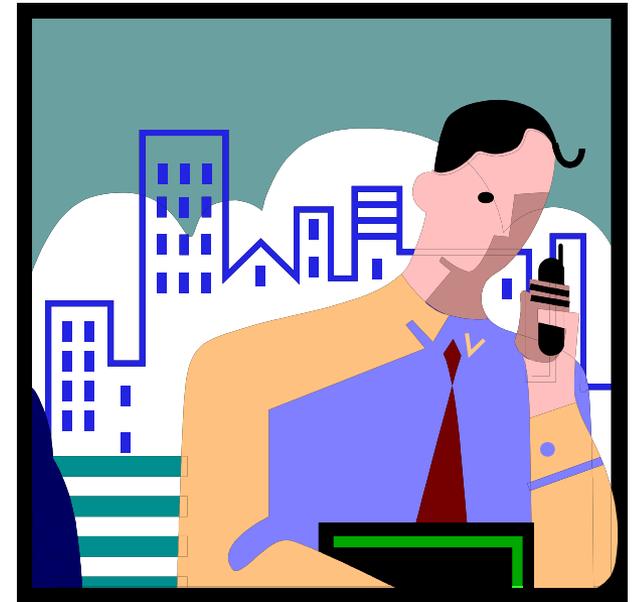
Psychological Functions

- Perceiving
 - Sensing
 - Intuition
- Judging
 - Thinking
 - Feeling

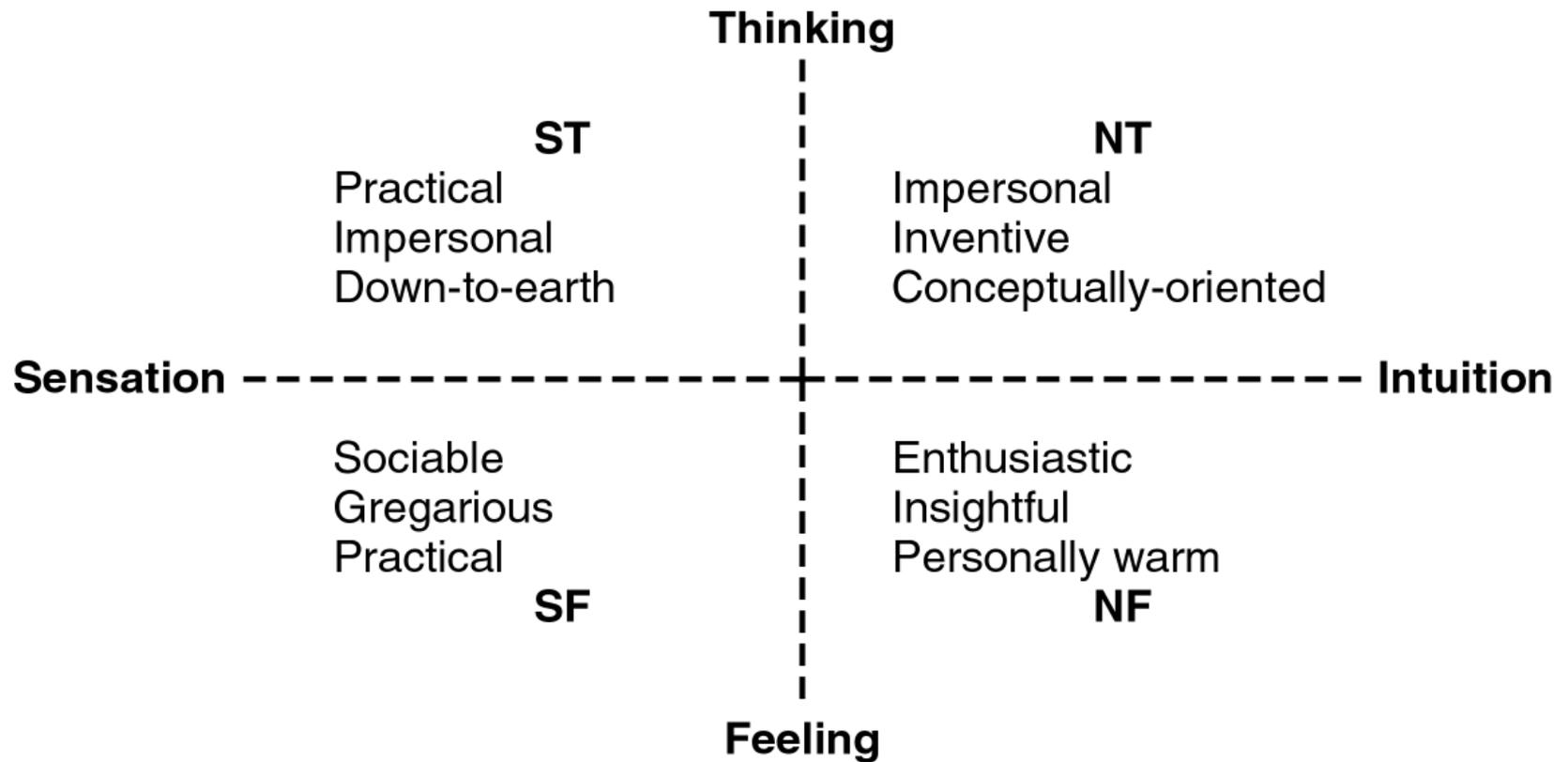


Interpretation: Cognitive Style Self-Assessment

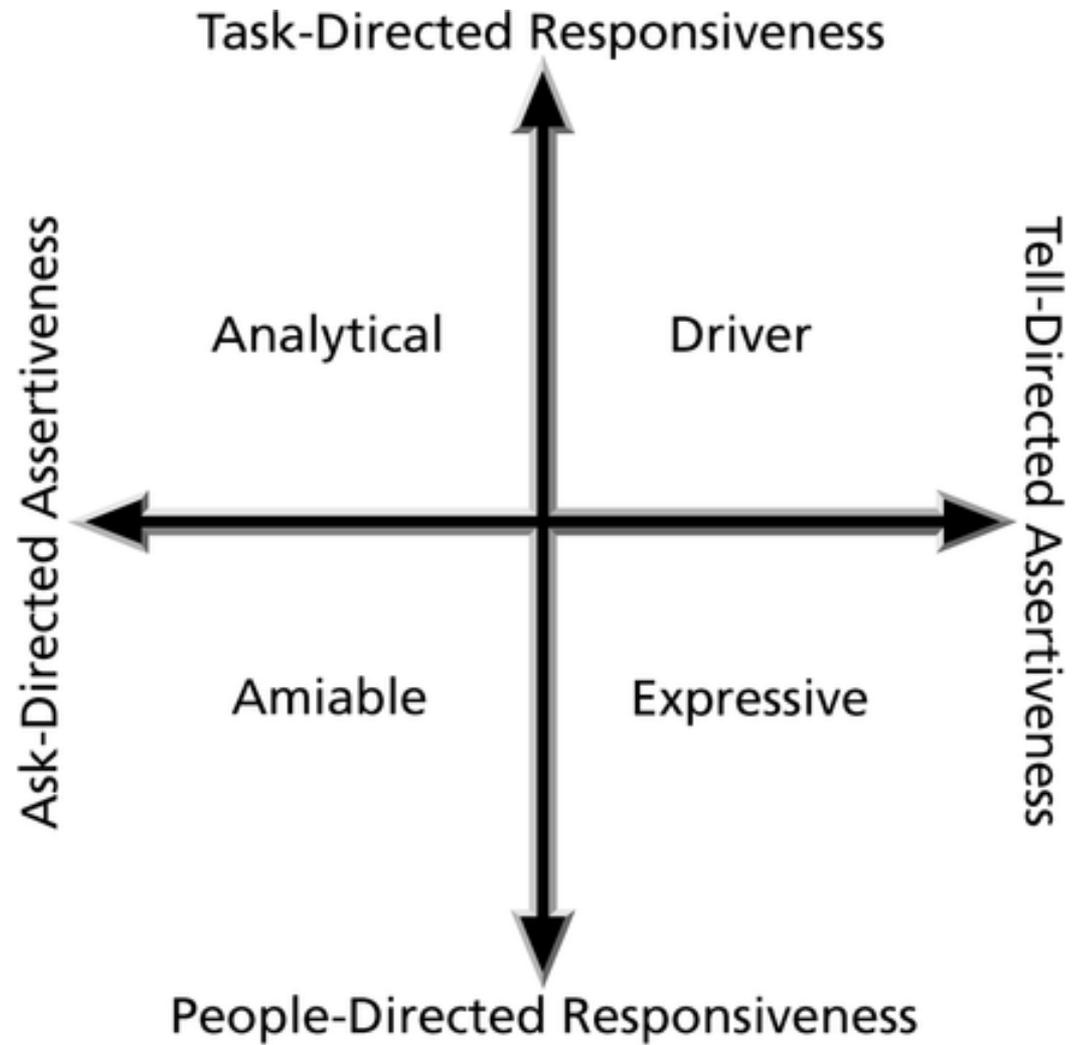
- Dominant Process
- Perception-Judgment Combinations
 - Sensation w/ Thinking (ST)
 - iNtuition w/ Thinking (NT)
 - Sensation w/ Feeling (SF)
 - iNtuition w/ Feeling (NF)



Jung's Personality Typology



Social Styles



American Typology - general population

Extrovert or **I**ntrovert
Sensing or **iN**tuition
Thinking or **F**eeling
Judging or **P**erceiving

<u>ISTJ</u> 11.6%	<u>ISFJ</u> 13.8%	<u>INFJ</u> 1.5%	<u>INTJ</u> 2.1%
<u>ISTP</u> 5.4%	<u>ISFP</u> 8.8%	<u>INFP</u> 4.3%	<u>INTP</u> 3.3%
<u>ESTP</u> 4.3%	<u>ESFP</u> 8.5%	<u>ENFP</u> 8.1%	<u>ENTP</u> 3.2%
<u>ESTJ</u> 8.7%	<u>ESFJ</u> 12.3%	<u>ENFJ</u> 2.4%	<u>ENTJ</u> 1.8%

Managers typology

	Total	ST	SF	NF	NT
Managers	848	53%	15%	10%	22%

Meyers-Briggs Type Indicator (MBTI)

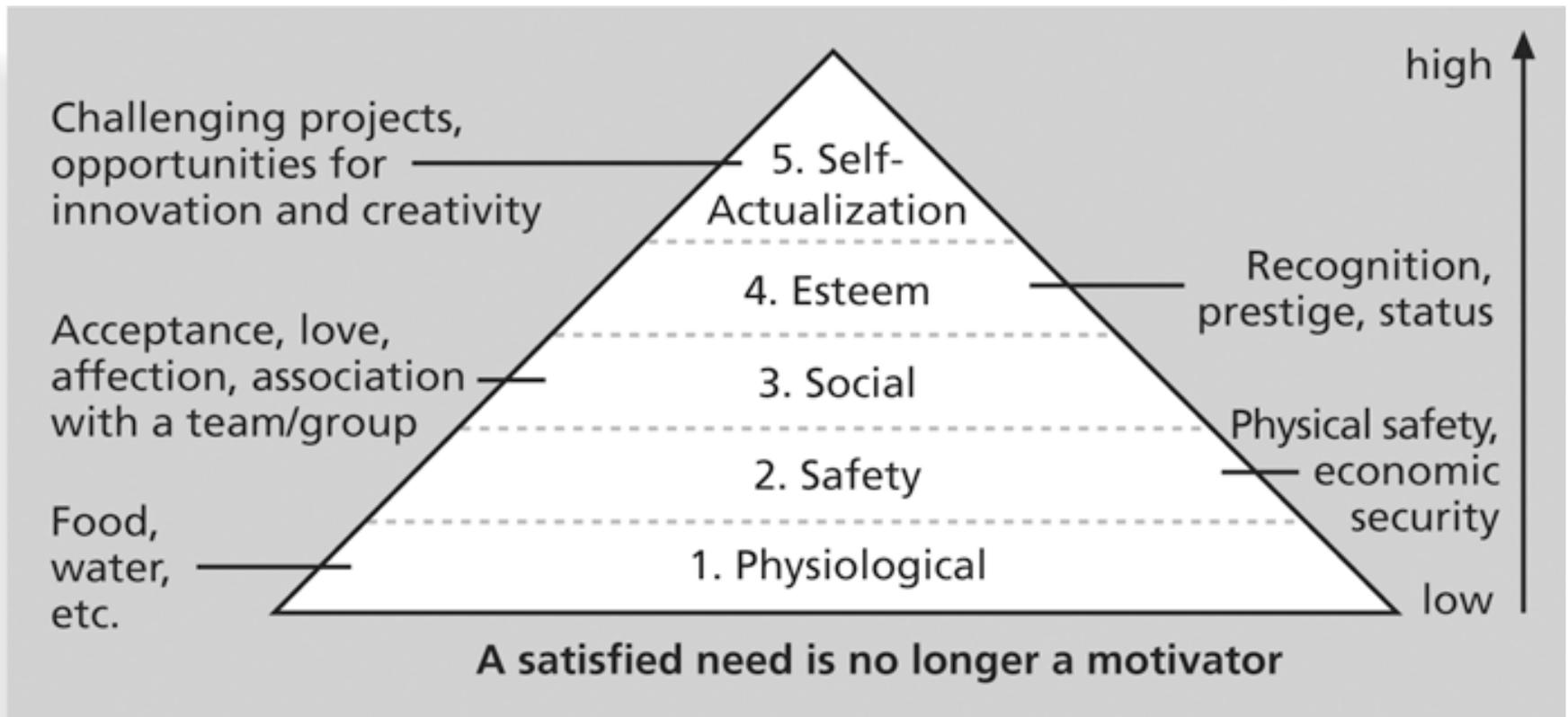
- MBTI is a popular tool for determining personality preferences and helping teammates understand each other
- Four dimensions include:
 - Extrovert/Introvert (E/I)
 - Sensation/Intuition (S/N)
 - Thinking/Feeling (T/F)
 - Judgment/Perception (J/P)
- NTs or rationals are attracted to technology fields
- IT people vary most from the general population in not being extroverted or sensing



Maslow's Hierarchy of Needs

- Abraham Maslow argued that humans possess unique qualities that enable them to make independent choices, thus giving them control of their destiny
- Maslow developed a hierarchy of needs that states that people's behaviors are guided or motivated by a sequence of needs

Maslow's Hierarchy of Needs



Herzberg's Motivational and Hygiene Factors

- Frederick Herzberg wrote several famous books and articles about worker motivation; he distinguished between:
 - Motivational factors: achievement, recognition, the work itself, responsibility, advancement, and growth, which produce job satisfaction
 - Hygiene factors: cause dissatisfaction if not present, but do not motivate workers to do more; examples include larger salaries, more supervision, and a more attractive work environment

Examples of Herzberg's Hygiene Factors and Motivators

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

McGregor's Theory X and Y

- Douglas McGregor popularized the human relations approach to management in the 1960s
 - **Theory X:** assumes workers dislike and avoid work, so managers must use coercion, threats, and various control schemes to get workers to meet objectives
 - **Theory Y:** assumes individuals consider work as natural as play or rest and enjoy the satisfaction of esteem and self-actualization needs
 - **Theory Z:** introduced in 1981 by William Ouchi, and is based on the Japanese approach to motivating workers, emphasizing trust, quality, collective decision making, and cultural values

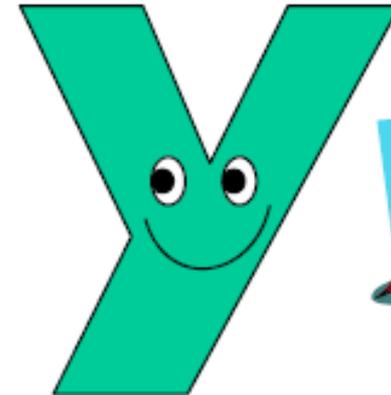
Σύγκριση Θεωρίας X & Y



Ο εργαζόμενος είναι οκνηρός.

Τα διοικητικά στελέχη πρέπει να επιβλέπουν στενά

Δημιουργία αυστηρών κανόνων και καθορισμένων αμοιβών



Ο εργαζόμενος δεν είναι οκνηρός.

Πρέπει να καλλιεργεί κίνητρο για τους εργαζομένους

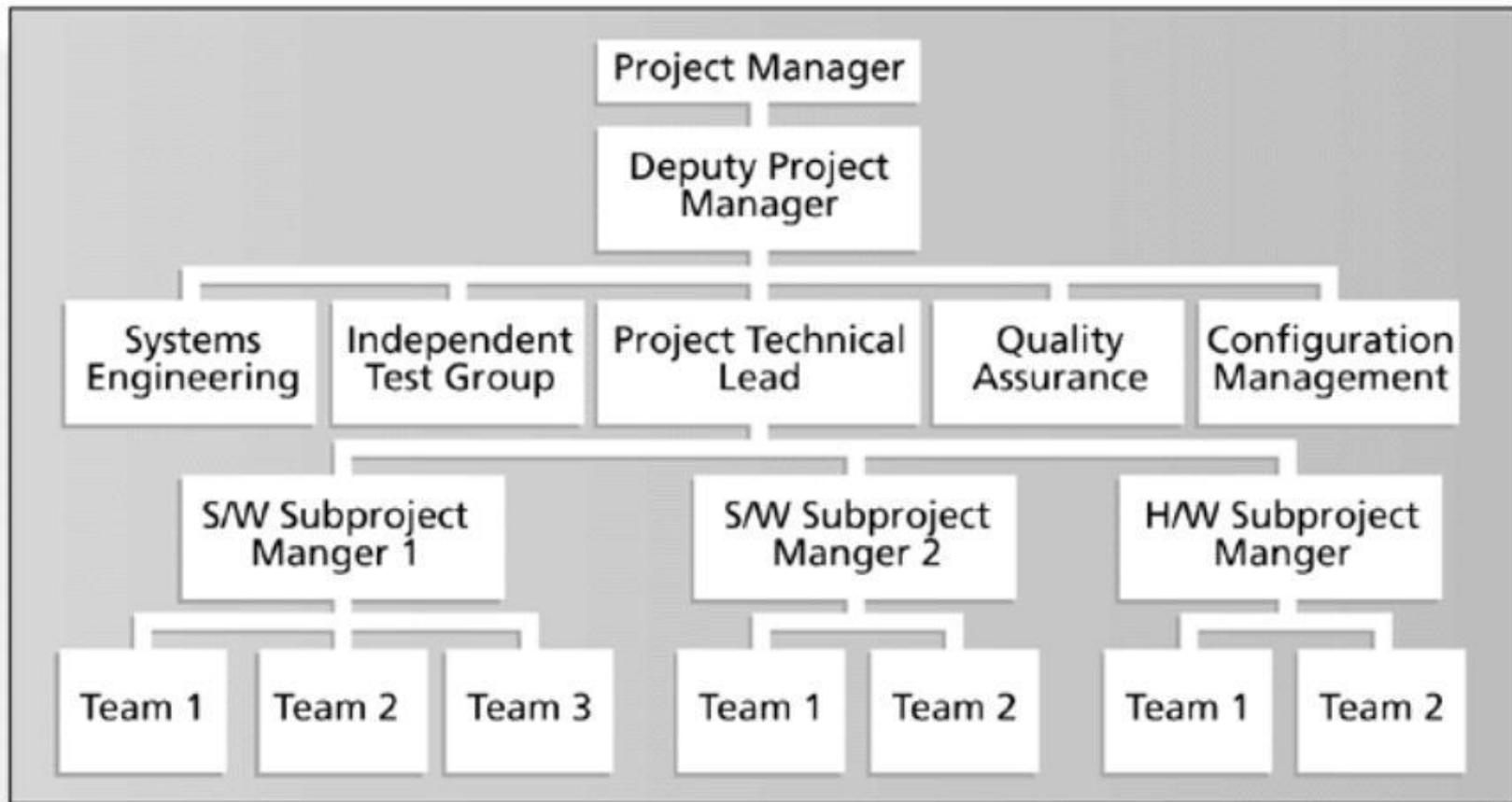
Παροχή αρμοδιοτήτων στους εργαζομένους



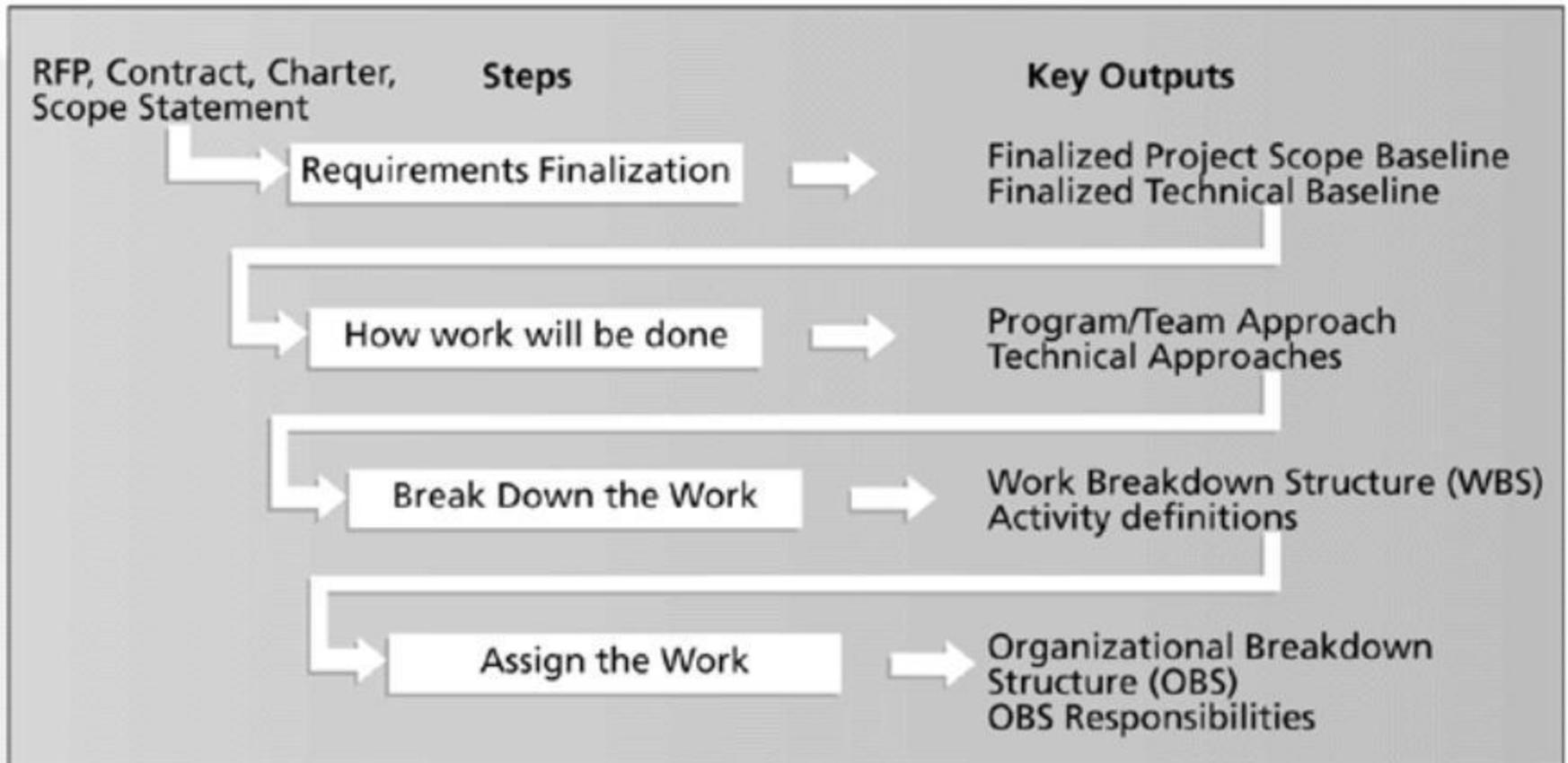
Human Resource Planning

- Involves identifying and documenting project roles, responsibilities, and reporting relationships
- Outputs include:
 - Project organizational charts
 - Staffing management plan
 - Responsibility assignment matrixes
 - Resource histograms

Sample Organizational Chart for a Large IT Project



Work Definition and Assignment Process





Responsibility Assignment Matrices

- A responsibility assignment matrix (RAM) is a matrix that maps the work of the project as described in the WBS to the people responsible for performing the work as described in the OBS
- Can be created in different ways to meet unique project needs

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
Systems Engineering	R	RP					R	
Software Development			RP					
Hardware Development				RP				
Test Engineering	P							
Quality Assurance					RP			
Configuration Management						RP		
Integrated Logistics Support							P	
Training								RP

R = Responsible organizational unit
P = Performing organizational unit

RAM Showing Stakeholder Roles

Items	Stakeholders				
	A	B	C	D	E
Unit Test	S	A	I	I	R
Integration Test	S	P	A	I	R
System Test	S	P	A	I	R
User Acceptance Test	S	P	I	A	R

A = Accountable

P = Participant

R = Review Required

I = Input Required

S = Sign-off Required

Sample RACI Chart

	GROUP A	GROUP B	GROUP C	GROUP D	GROUP E
Test Plans	R	A	C	C	I
Unit Test	C	I	R	A	I
Integration Test	A	R	I	C	C
System Test	I	C	A	I	R
User Acceptance Test	A	I	C	R	A

R = responsibility, only one R per task

A = accountability

C = consultation

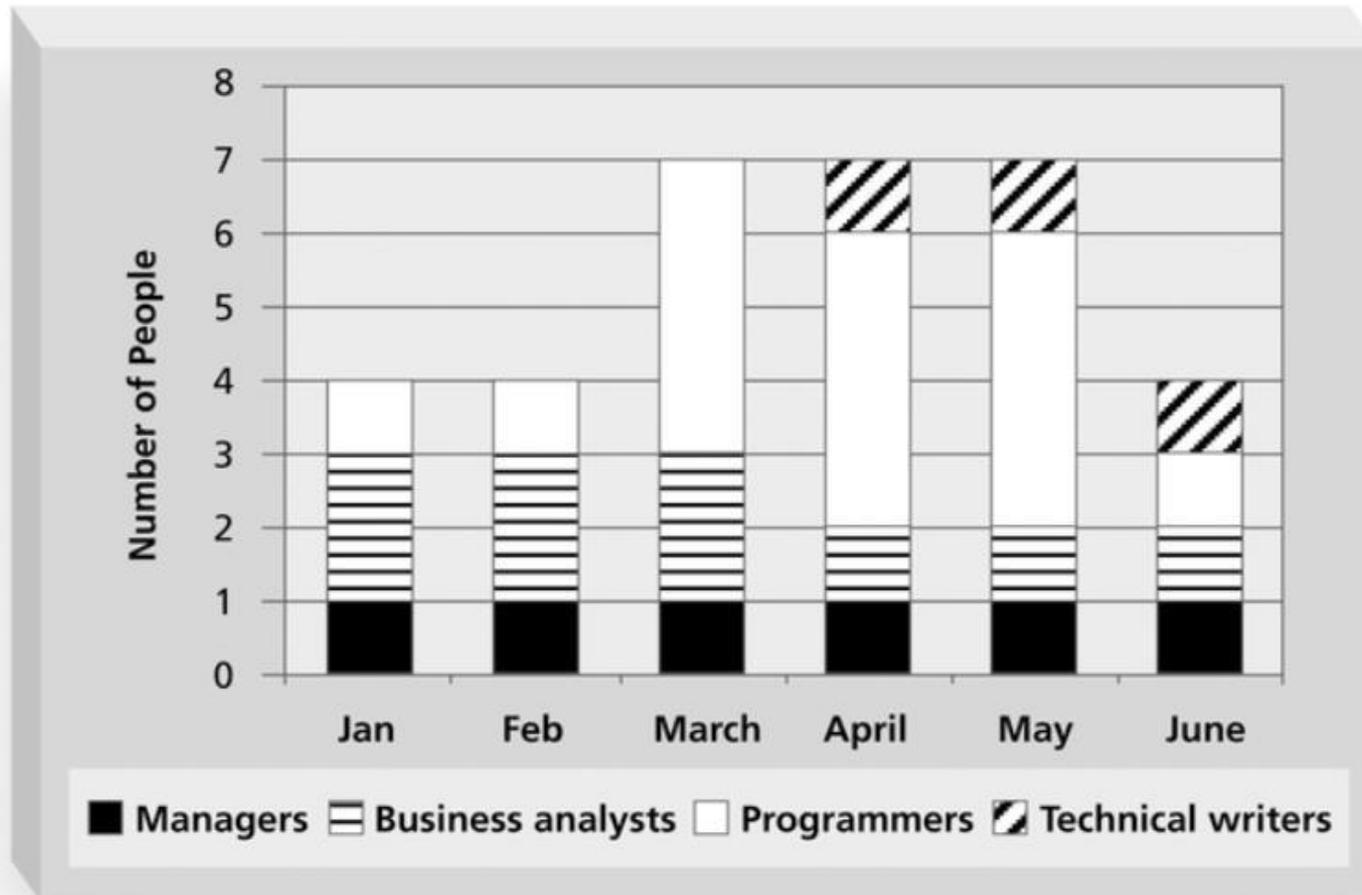
I = informed



Staffing Management Plans and Resource Histograms

- A staffing management plan describes when and how people will be added to and taken off the project team
- A resource histogram is a column chart that shows the number of resources assigned to a project over time

Sample Resource Histogram





Acquiring the Project Team

- Acquiring qualified people for teams is crucial
- The project manager who is the smartest person on the team has done a poor job of recruiting!
- It's important to assign the appropriate type and number of people to work on projects at the appropriate times



Developing the Project Team

- The main goal of team development is to help people work together more effectively to improve project performance
- It takes teamwork to successfully complete most projects

Importance of Teams

- Successful managers are those who work with successful teams.
- Groups constitute the basic building blocks of any organization.



Groups



- Two or more people who meet regularly over a period of time, perceive themselves as a distinct entity, share common values, and strive for common objectives

Teams

- Groups of people with complementary skills, who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable





The nature of a teams

- (1) common purpose;
- (2) interdependence;
- (3) clarity of roles and contribution;
- (4) satisfaction from mutual working;
- (5) mutual and individual accountability;
- (6) realisation of synergies; and
- (7) empowerment.

Key characteristics

Groups - Teams

Factor	Group or 'team'	High performing team
Size	Unlimited	Limited (normally 6-8)
Leadership style	Dictatorial or non-existent	Mixture of authoritative and coaching style**
Different viewpoints	Unwelcome	Welcome
Goals	May or may not have goals	Agreed and shared goals
Recruitment of members	You arrived and they were already there!	You considered gaps in the team and recruited for them
Membership	Conformance	Complementary roles
Decision-making	Top down	Shared
Review	Self-reflection on personal agenda	Shared feedback on team effectiveness
Problems	Blame culture	Mutual support
Relationships	Adversaries	Friends

Characteristics of High Performing Teams

- Small Size
- Complementary Skills
- Common Purpose
- Specific Goals
- Common Approach
- Mutual Accountability

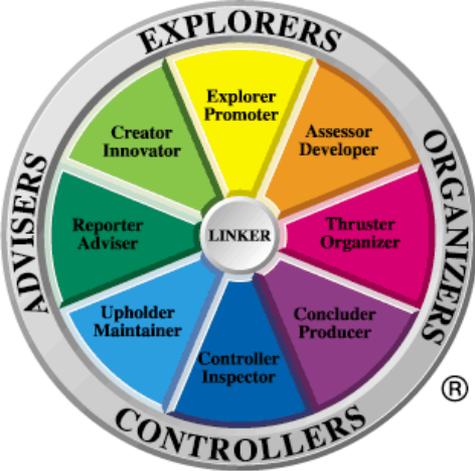




SOURCE: Adapted from C. Margerison and D. McCann, *The Team Development Manual* (Toowong, Queensland, Australia: Team Management Resources, 1990) 20.

The Margerison-McCann team management wheel describes and maps team role preferences





Advising: Giving and gaining information

Innovating: Creating and experimenting with new ideas

Promoting: Searching for and persuading others of new opportunities

Developing: Assessing and testing the applicability of new approaches

Organizing: Establishing and implementing ways and means of making things work

Producing: Operating established systems and practices on a regular basis

Inspecting: Checking and auditing that systems and contracts are working

Maintaining: Ensuring that standards and processes are upheld

**Five Stages of
Team
Development**

Forming

Storming

Norming

Performing

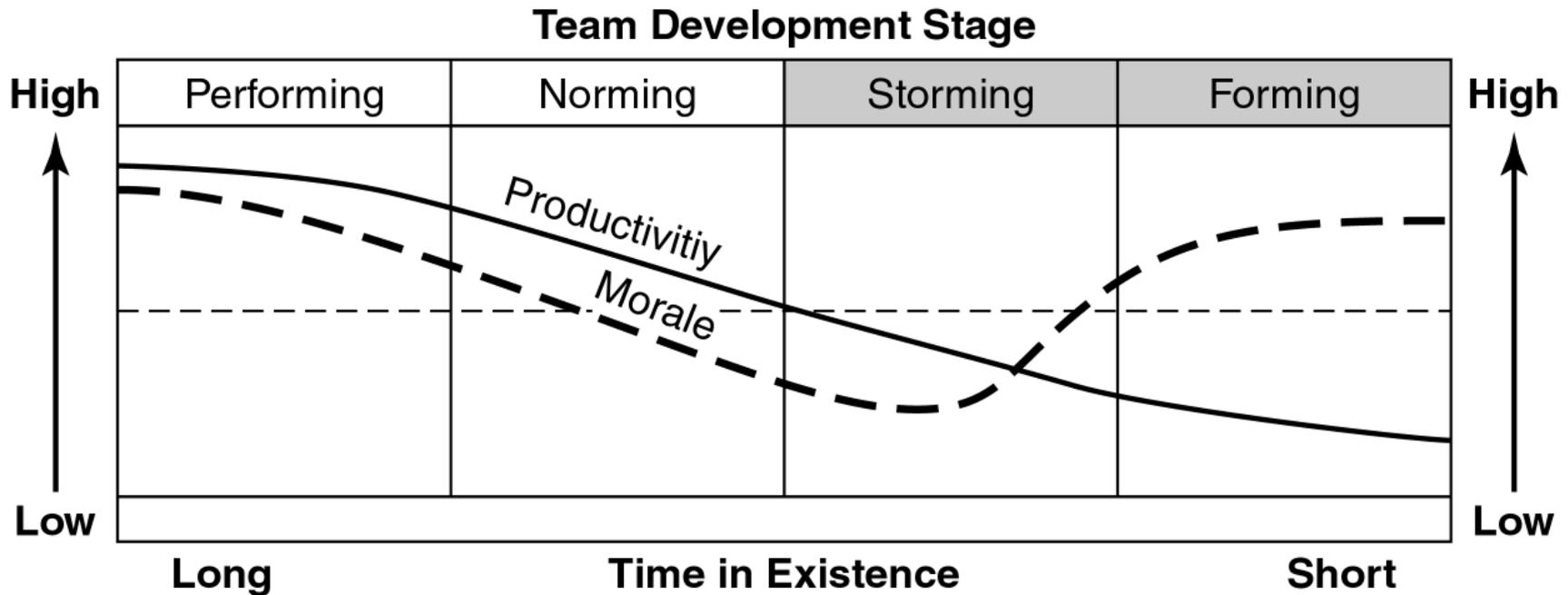
Adjourning



	Group structure	Task activity
Forming	Considerable anxiety, testing to discover the nature of the situation, what help can be expected from the leader and what behaviour will or will not be appropriate	What is the task? Members seek the answers to that basic question, together with knowledge of the rules and methods to be employed
Storming	Conflict emerges between sub-groups; the authority and/or the competence of the leader is challenged. Opinions polarise. Individuals react against efforts of the leader or group to control them	The value and feasibility of the task is questioned. People react emotionally against its demands
Norming	The group begins to harmonise; it experiences group cohesion or unity for the first time. Norms emerge as those in conflict are reconciled and resistance is overcome. Mutual support develops	Co-operation on the task begins; plans are made and work standards laid down. Communication of views and feelings develop
Performing	The group structures itself or accepts a structure, which fits most appropriately its common task. Roles are seen in terms functional to the task and flexibility between them develops	Constructive work on the task surges ahead; progress is experienced as more of the group's energy is applied to being effective in the area of their common task

Source: Adair (1986)

Variations in Productivity and Morale during Team Development

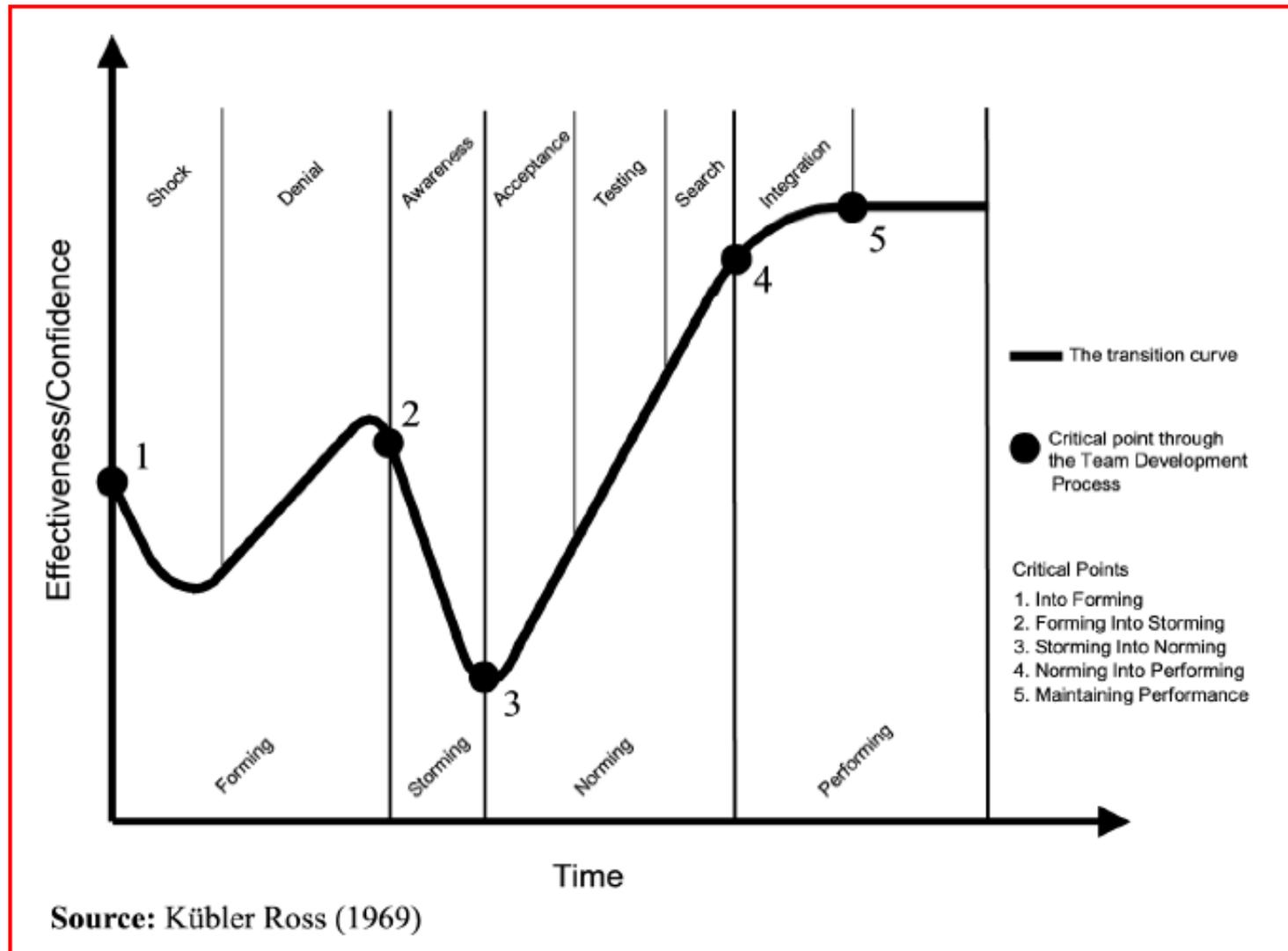


The three interlocking needs

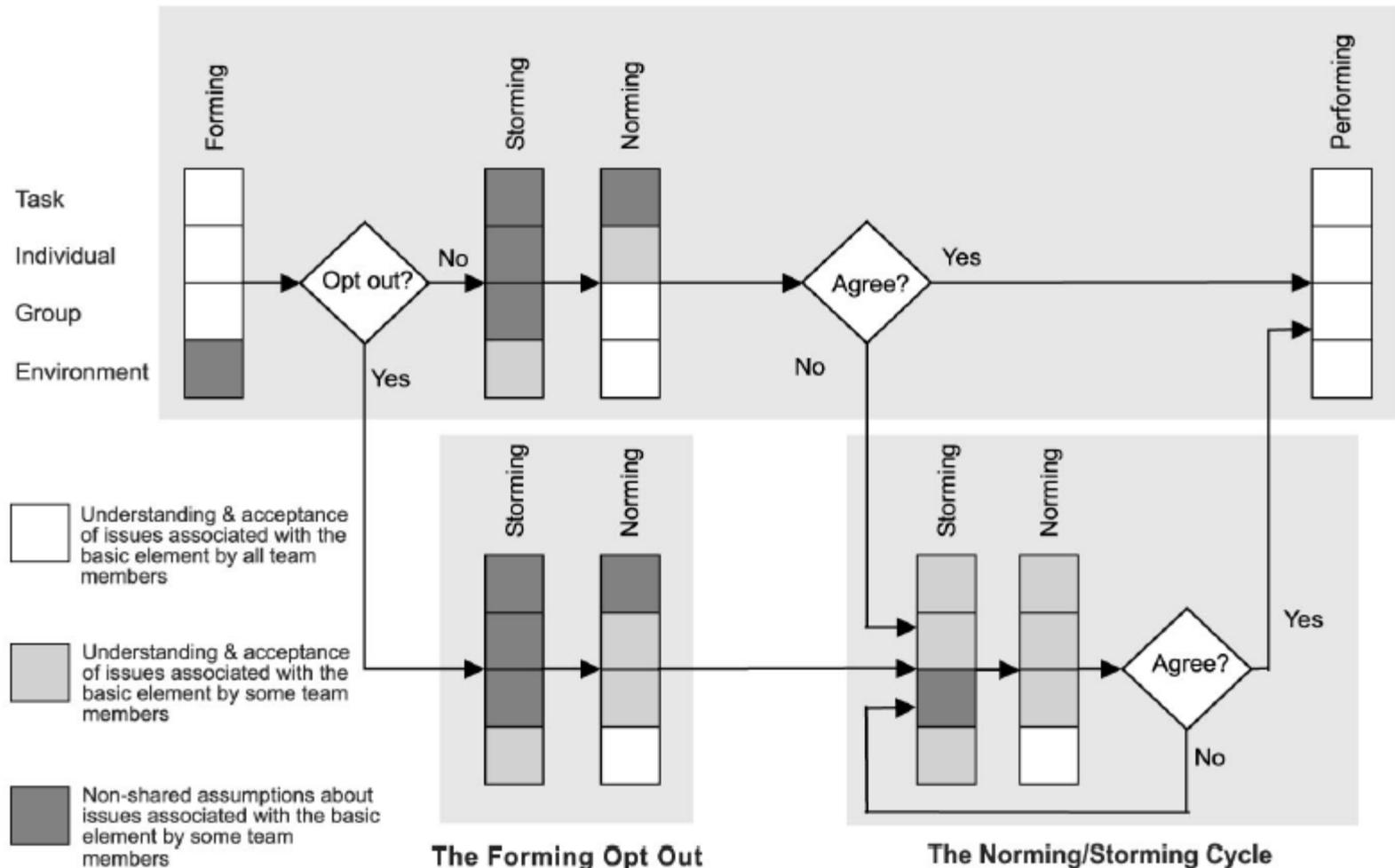
Need	Description
Task	The need to accomplish something. The need of the group is to try to accomplish this task. So long as the task remains undone, there will be a tension in the group and an urge to complete the task. The task is what the group is talking about or working on. It is usually seen in terms of things rather than people
Group	The need to develop and maintain working relationships amongst members so that the group task can be accomplished. This is called the maintenance need of the group. Maintenance refers primarily to people and their relationships with each other. It concerns how people relate to each other as they work at the group task. Unless members listen to each other, for example, and try to build upon each other's suggestions it will be very difficult, and often impossible, for the group to accomplish its task
Individual	The needs of individuals come with them into groups. People work in groups not only because of interest in the task to be accomplished, but also because membership of groups fulfils their various needs. If such needs can be met along with and not at the expense of the group task and maintenance needs, then the group will tend to be more effective

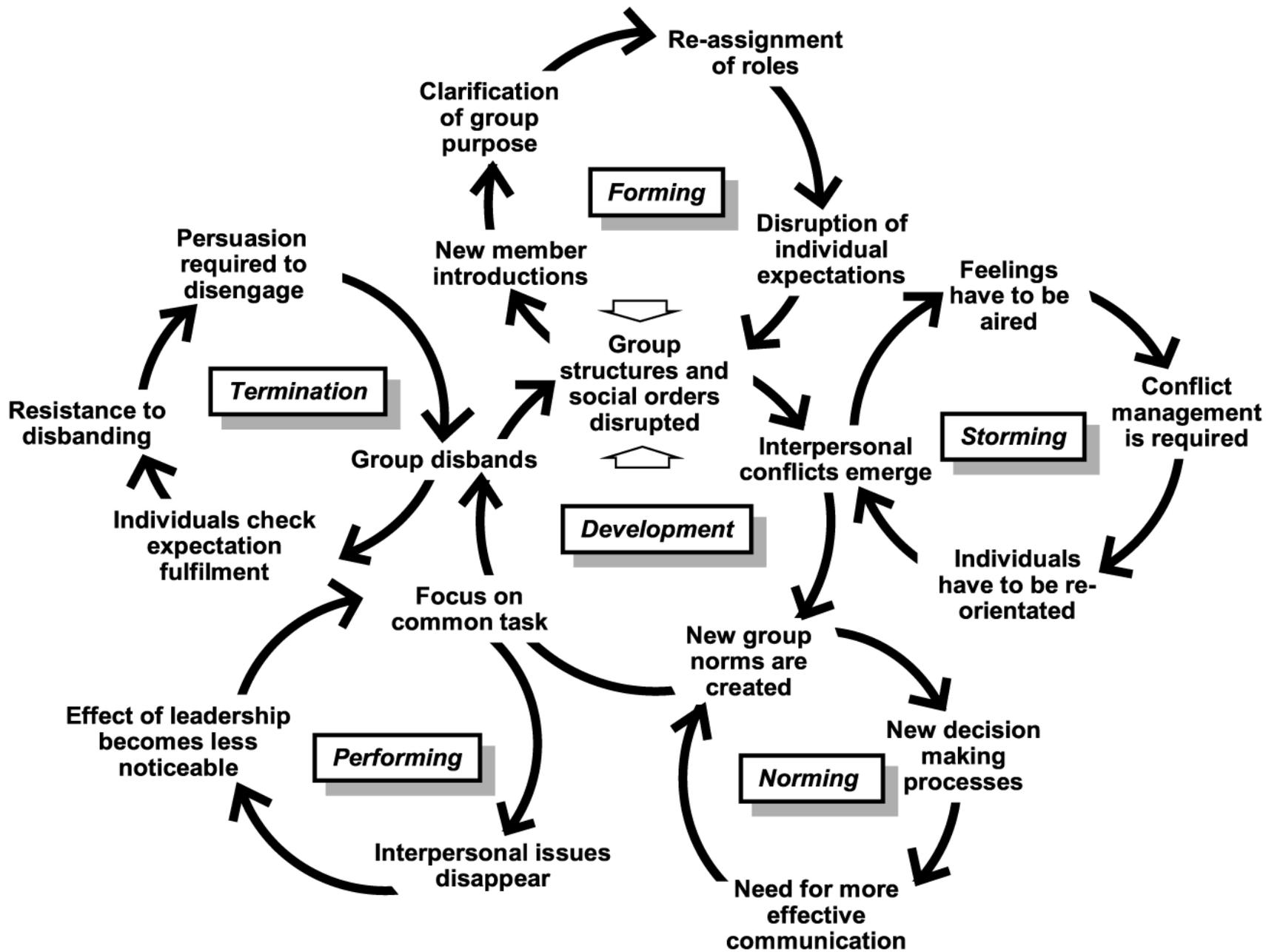
Source: Adair (1986)

The transition curve for the employee



The integrated team development process

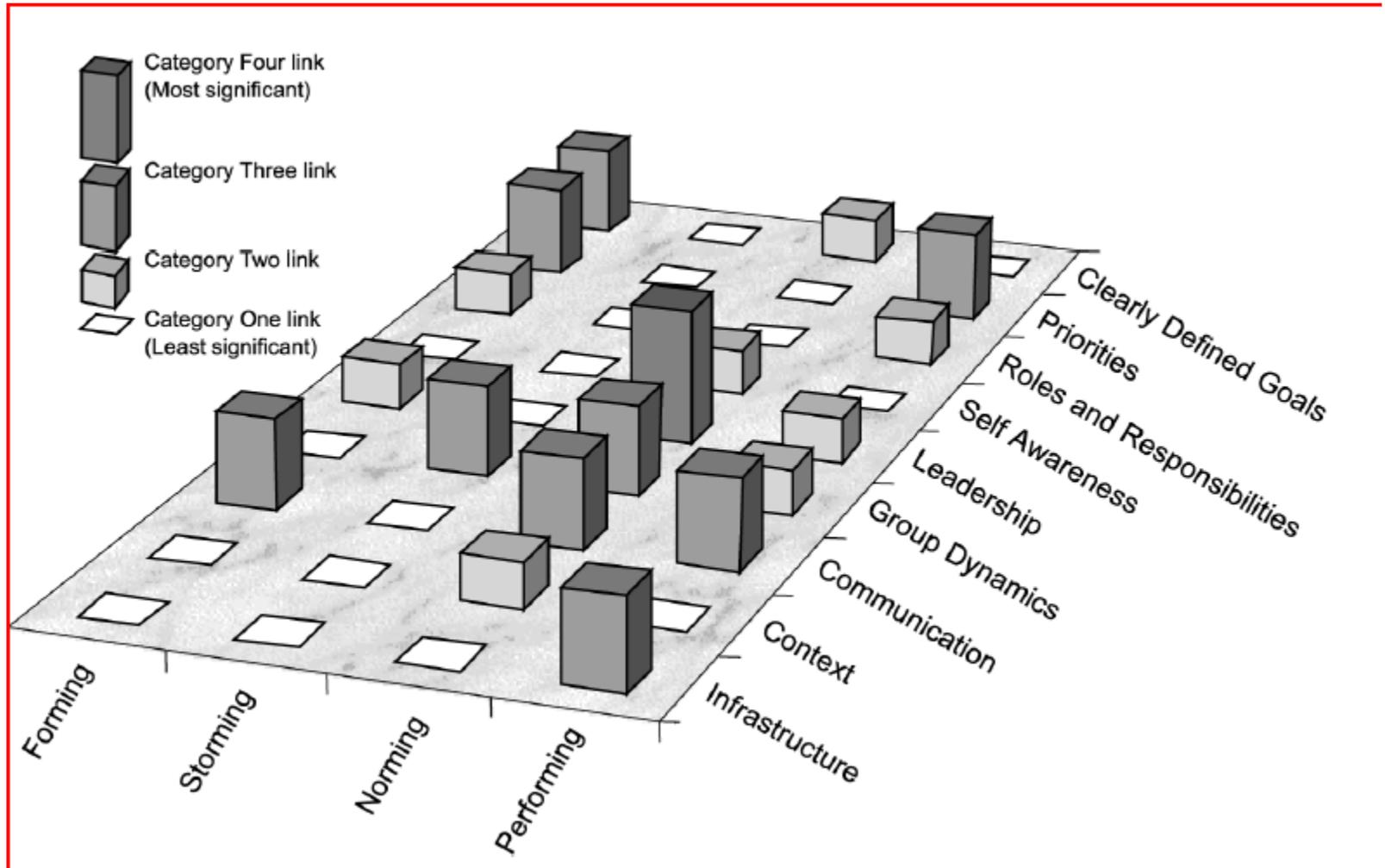




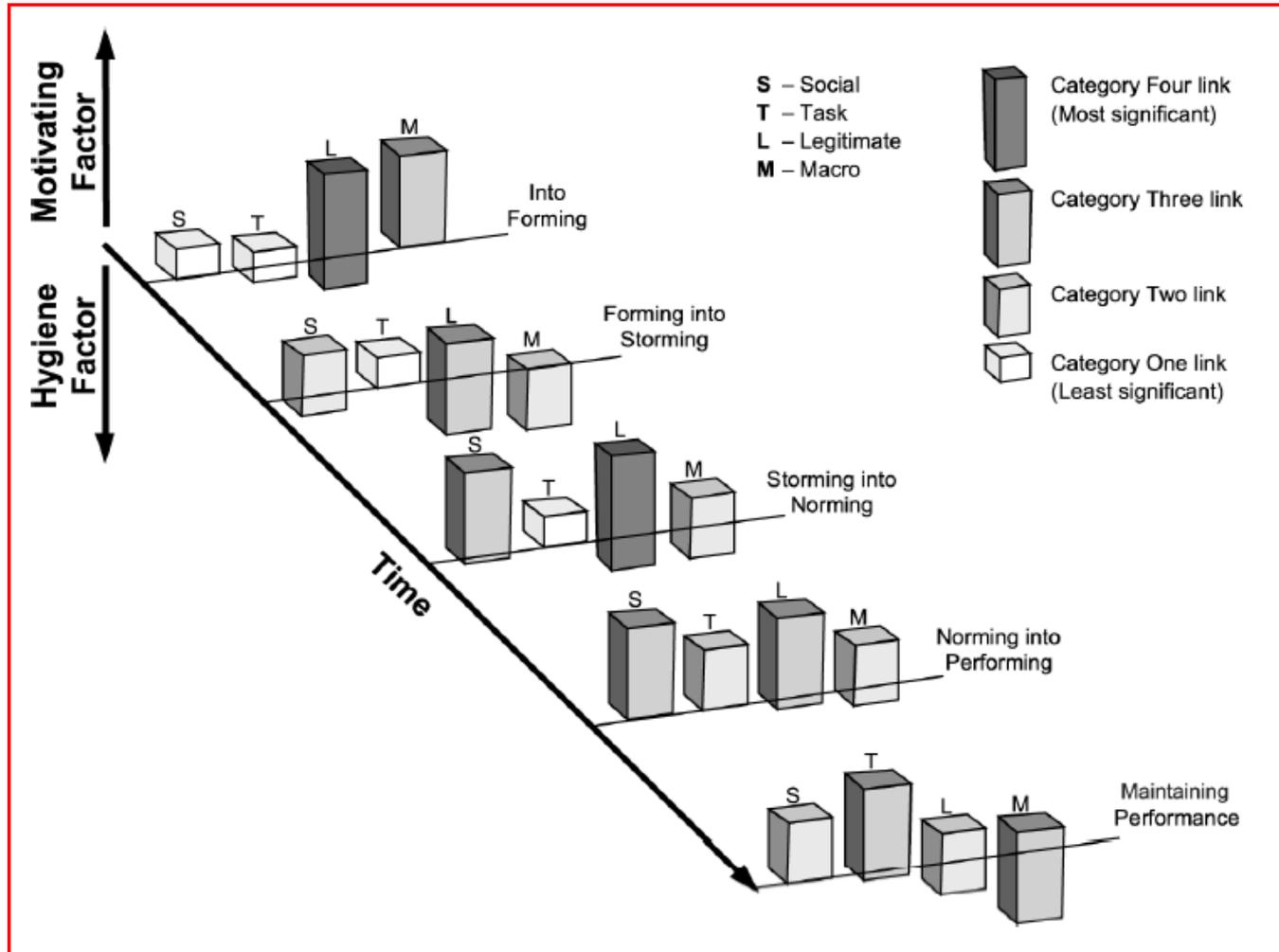
The nine key factors that affect team landscape

Basic Element	Key factor
Task	Clearly defined goals
	Priorities
Individual	Roles and Responsibilities
	Self awareness
Group	Leadership
	Group dynamics
	Communication
Environment	Context
	Infrastructure

The team landscape



The leadership landscape





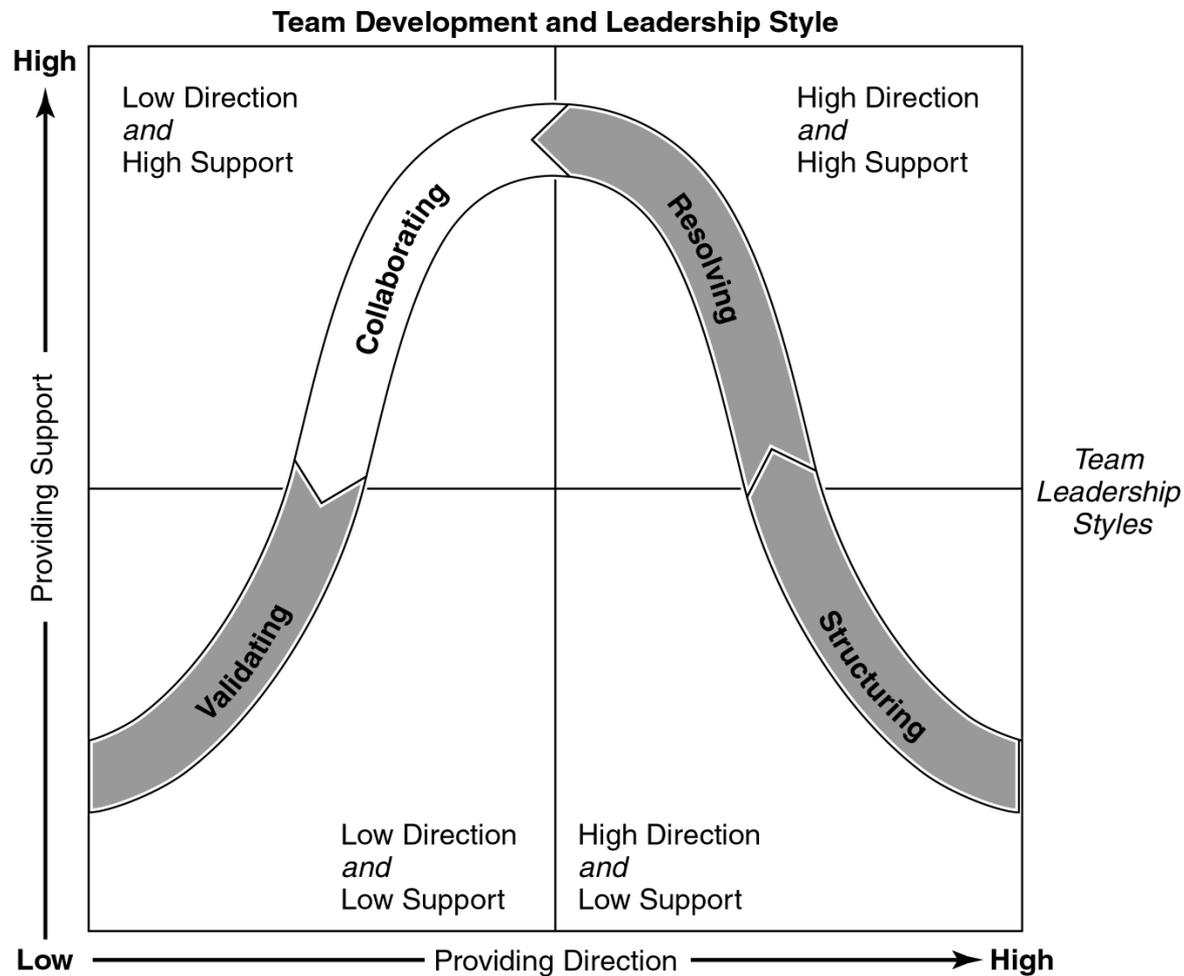
Hygiene – Motivating Factors

- **A hygiene factor** is defined as one that will not motivate a team if present, but will de-motivate it if absent.
- **A motivating factor** is defined as one that will not de-motivate a team if absent, but will motivate it if present.

Key leaders roles

- **Legitimate leader** is the publicly appointed leader of the team who is accountable for delivery of the team's objectives.
- **Social leader** is defined as the individual who undertakes to build and maintain a network of relationships with other team members.
- A team attempting to deliver a technically complex objective required a series of individuals to lead specific tasks that required undertaking and completing during the delivery of the team's overall goal.
- Senior management, who as individuals represented the views of the "macro" organisation.

Leadership Styles and Team Development



Adapting Leadership Style to Facilitate Team Development



- Structuring
- Resolving
- Collaborating
- Validating
- Terminating



Improving Team Effectiveness

- Become Aware of Team Problems
- Determine Symptoms of Ineffective Teams
 - Communicating Outside the Group
 - Over-Dependency on the Leader
 - Unrealized Decisions
 - Hidden Conflicts
 - Fighting without Resolution
 - Subgroups



Team Roles

- Roles are shared expectations of how group members will fulfill the requirements of their position.
- People develop their roles based on their own expectations, the organization's expectations, and the group's expectations.

Group Roles - 1

- Task roles – The things group members do and say that directly aid in the accomplishment of its objective(s).
- Task roles are sub classified into objective clarifiers, planners, organizers, leaders, and controllers.
- Maintenance roles – The things group members do and say to develop and sustain group dynamics.
 - Defines a group's social atmosphere.
- Sub classification of maintenance roles: formers, consensus seekers, harmonizers, gatekeepers, encourager, and compromisers.



Team Roles -2

- Personal roles – The things members do and say to meet their own needs or objectives at the expense of the team.
 - Following hidden agendas.
- Sub classification of self-interest roles: aggressors, blockers, recognition seekers, and withdrawers.

Thamhain and Wilemon's Ways to Have Influence on Projects

- 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 others' 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 Ways to Have Influence on Projects (continued)

- 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



Ways to Influence that Help and Hurt Projects

- Projects are more likely to succeed when project managers exert influence with:
 - Expertise
 - Work challenge
- Projects are more likely to fail when project managers rely too heavily on:
 - Authority
 - Money
 - Penalty



Power

- Power is the potential ability to influence behavior to get people to do things they would not otherwise do
- Types of power include:
 - Coercive
 - Legitimate
 - Expert
 - Reward
 - Referent



Improving Effectiveness

- Project managers can apply Covey's 7 habits to improve effectiveness on projects
 - Be proactive
 - Begin with the end in mind
 - Put first things first
 - Think win/win
 - Seek first to understand, then to be understood
 - Synergize
 - Sharpen the saw

Empathic Listening and Rapport

- Good project managers are empathic listeners; they listen with the intent to understand
- Before you can communicate with others, you have to have rapport – a relation of harmony, conformity, accord, or affinity
- Mirroring is the matching of certain behaviors of the other person, a technique to help establish rapport
- IT professionals need to develop empathic listening and other people skills to improve relationships with users and other stakeholders



Reward and Recognition Systems

- Team-based reward and recognition systems can promote teamwork
- Focus on rewarding teams for achieving specific goals
- Allow time for team members to mentor and help each other to meet project goals and develop human resources



Managing the Project Team

- Project managers must lead their teams in performing various project activities
- After assessing team performance and related information, the project manager must decide:
 - If changes should be requested to the project
 - If corrective or preventive actions should be recommended
 - If updates are needed to the project management plan or organizational process assets



General Advice on Teams

- Be patient and kind with your team
- Fix the problem instead of blaming people
- Establish regular, effective meetings
- Allow time for teams to go through the basic team-building stages
- Limit the size of work teams to three to seven members
- Plan some social activities to help project team members and other stakeholders get to know each other better
- Stress team identity
- Nurture team members and encourage them to help each other
- Take additional actions to work with virtual team members

Five Dysfunctions of a Team

- Patrick Lencioni, author of several books on teams, says that “Teamwork remains the one sustainable competitive advantage that has been largely untapped”*
- The five dysfunctions of teams are:
 - Absence of trust
 - Fear of conflict
 - Lack of commitment
 - Avoidance of accountability
 - Inattention to results

**Lencioni, Patrick, “Overcoming the Five Dysfunctions of a Team,” Jossey-Bass: San Francisco, CA (2005) p. 3.*



Using Software to Assist in Human Resource Management

- Software can help in producing RAMS and resource histograms
- Project management software includes several features related to human resource management such as:
 - Assigning resources
 - Identifying potential resource shortages or underutilization
 - Leveling resources



Project Resource Management Involves Much More Than Using Software

- Project managers must:
 - Treat people with consideration and respect
 - Understand what motivates them
 - Communicate carefully with them
- Focus on your goal of enabling project team members to deliver their best work



Chapter Summary

- Project human resource management includes the processes required to make the most effective use of the people involved with a project
- Main processes include:
 - Human resource planning
 - Acquiring the project team
 - Developing the project team
 - Managing the project team