

Leadership in Systems Engineering: Building High Performance Teams

Kevin Buie

5 May 2008

**SELP 695 Integrative Project
Advisor: Dr. Arnold Galloway**

- ☐ *Project Objectives*
- ☐ *Project Approach*
- ☐ *A Team is a System*
- ☐ *Process To Build a Team*
- ☐ *Team Enablers*
- ☐ *Ethics and Team Decisions*
- ☐ *Conclusions*

Submitted in partial fulfillment of the degree requirements for Master of Science in Systems Engineering

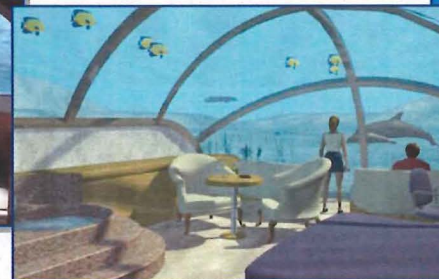
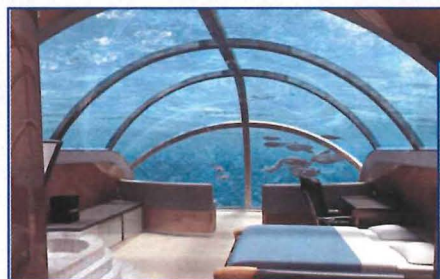
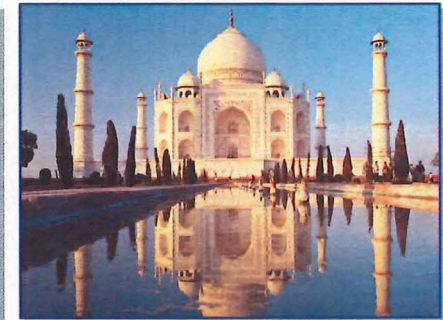
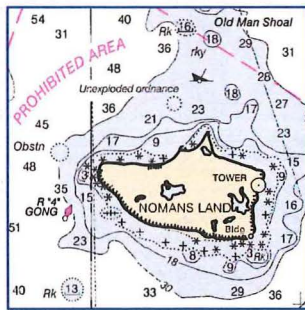
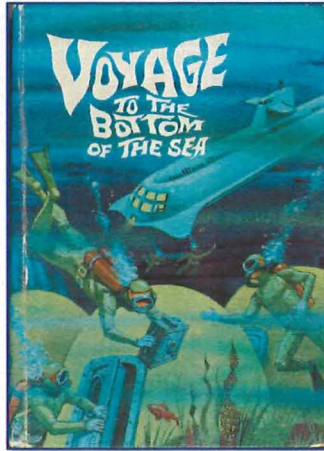
Background and Context

Childhood Dreams

☒ Live on submarine

☒ Travel the World

☐ Build the first house underwater



Project Objectives

■ Personal Objectives

- Further develop the capability *to lead highly trained cross-functional teams*
 - Includes engineers, scientists, software developers, technicians, subcontractors, and business/sales/marketing stakeholders
 - Multi-disciplined groups often fail because they cannot function as a team
- Dr. Galloway (my advisor) asked me: ***“What do you want as an output of this Integrated Project?”***
 - I want something practical, that I can use throughout my career
 - Checklists, used to achieve the highest performance in building and leading a cross-functional team

■ Statement of Project Objectives:

- ☐ Create tailorable checklists used to build and maintain a High Performance Team (HPT).
- ☐ Determine the enablers required to support and sustain a high performance environment.
- ☐ Identify the leadership styles needed in a high performance organization.
- ☐ Develop a Code of Ethics for a leading Systems Engineer/Manager.

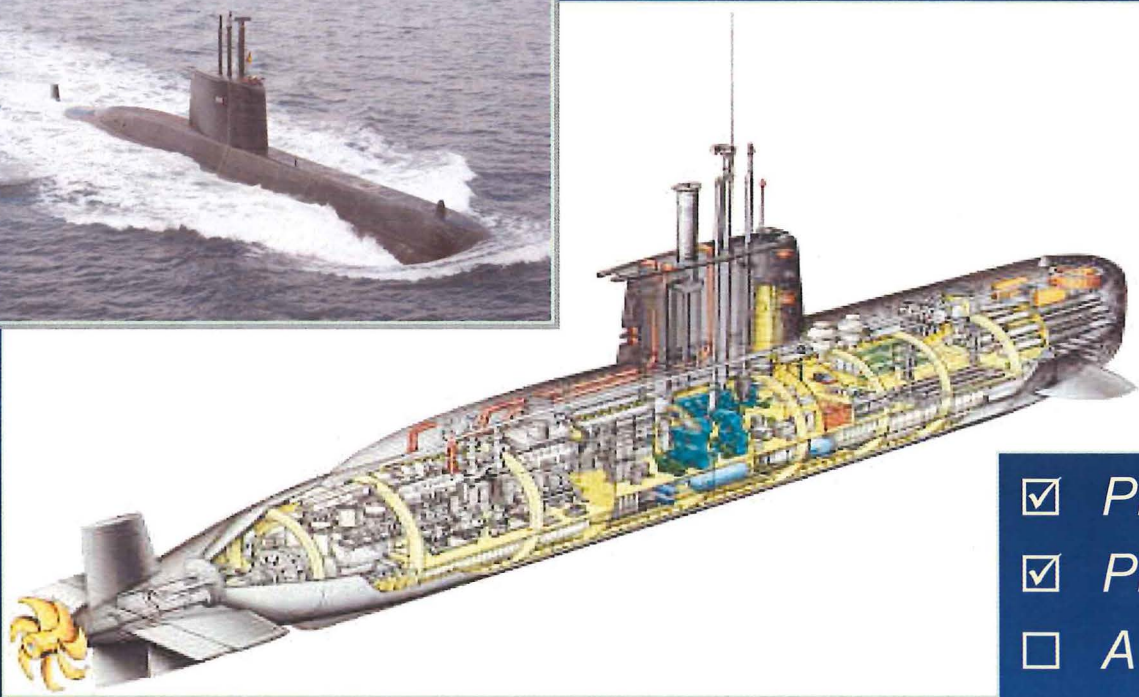
Project Approach

- I examined the principles taught in the LMU SE Graduate Program and looked for aspects of **high performance** and **leadership**.
- This project affords an opportunity to integrate the studied principals of **management** and **systems engineering** seen below:

SE Class	Aspects of Leadership and High Performance	Professor
Systems Engineering	<i>Communication and accountability, requirements, interfaces, systems approach, verification, validation, organization, decomposition, traceability</i>	Dr. K. Miller
Advanced Systems Engineering	<i>Leadership of integrated teams, management for uncertainty, decision making, risk & opportunity, metrics</i>	Dr. A. Galloway
Program Management	<i>Management techniques, leadership, common vision, coordination, metrics</i>	Mr. B. Molnaa
Ethics	<i>Values, purpose, vision, doing the right thing, trust</i>	Dr. J. Stupar
Case Studies	<i>Preparation for leadership positions, decision-making, success/failure lessons learned, teamwork, communication, technical leadership, executive support,</i>	Dr. A. Galloway
Systems Seminar	<i>Theories and applications for business development, marketing, capture, operations, and systems engineering</i>	Dr. B. Oppenheim
Quality	<i>Predictability, reliability, Demming's 14 points, optimization of process</i>	Dr. B. Oppenheim
Lean	<i>Create/maintain/flow value, kaizen (continuous improvement), do it right first time, empowerment, know your customer (internal/external)</i>	Dr. B. Oppenheim
Systems Architecture	<i>Seeing the "big picture", communication, interfaces, translation of needs to a solution</i>	Dr. C. Tang

*If a team is a **system**, then **systems engineering processes** can be adapted to build and sustain a high performance team.*

A Team is a System...

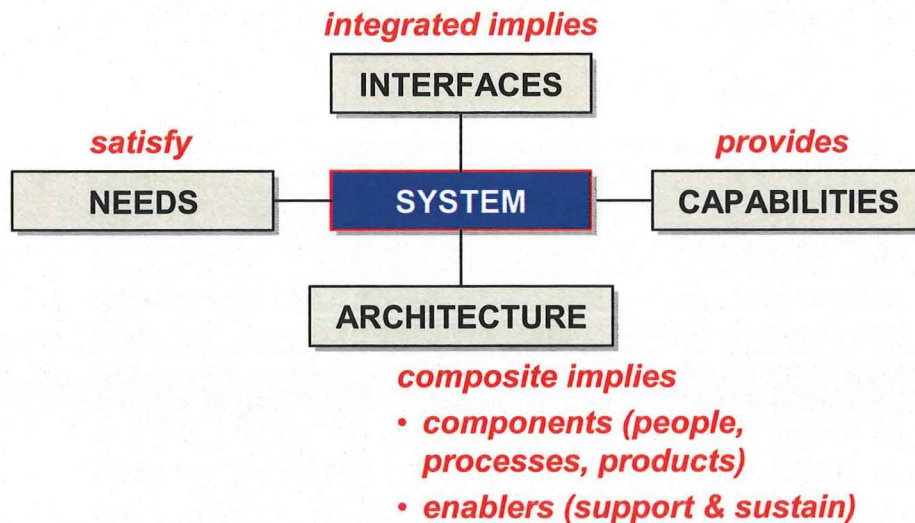


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A Team is a System

A system is an *integrated composite* of people, products and processes that *provide a capability* to *satisfy a stated need* or objective. (source: EIA/IS-632)

A decomposition of this definition provides the following:

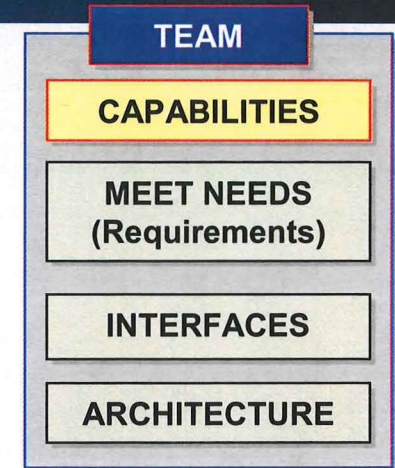


A High Performance Team is a *System*:



If each member is considered to be a system in itself, then the *team* is also a *system-of-systems* with operational and managerial independence, geographic distribution, emergent behavior, and evolutionary development. (adapted from: Andrew Sage "System of Systems")

Capabilities of a High Performance Team



- High-performing teams and organizations are built of people, plans, and practices *aligned* around a *shared purpose*.

(George Bradt *"The New Leader's 100-Day Action Plan"*)

- Checklist: High Performance Teams are *capable* of:
 - ☐ Reaching consensus on the one burning imperative – overcoming barriers, stovepipes, and departments that don't cooperate
 - ☐ Producing significant results by focusing on key performance milestones
 - ☐ Delighting customers, suppliers, team members (and other stakeholders)
 - ☐ Building team confidence by investing in early successes
 - ☐ Remaining highly adaptive, sharing leadership and accountability
 - ☐ Communicating effectively
 - ☐ Learning from mistakes and engaging in continuous improvement
 - ☐ Developing trust

Capabilities of a High Performance Team (cont.)

Checklist: What are the *characteristics* of a High Performance Team?

Purpose and Vision

- ☐ Commitment is made to a common purpose.
- ☐ Value to success-critical stakeholders is stressed.
- ☐ Specific goals are explicit and measurable.
- ☐ Members recognize their individual role, and their relationship in "The Big Picture".

Communication

- ☐ Active listening for understanding not judgment.
- ☐ Ideas are encouraged from all members.
- ☐ Respectful feedback allows awareness of strengths and weaknesses.
- ☐ Access to needed data is not blocked.
- ☐ Direction and priorities are clear.

Accountability

- ☐ Responsibility is shared, accountability is mutual.
- ☐ Boundaries of authority are well understood.
- ☐ Regular assessments ensure progress.
- ☐ Poor performers feel pressure to improve.

Leadership

- ☐ Styles are flexible and situational.
- ☐ Roles can be shifted as needed.
- ☐ Alignment toward goals is maintained.

Trust

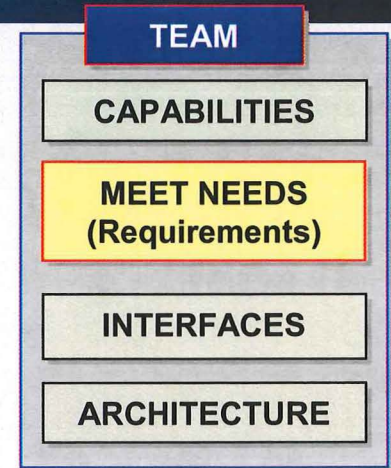
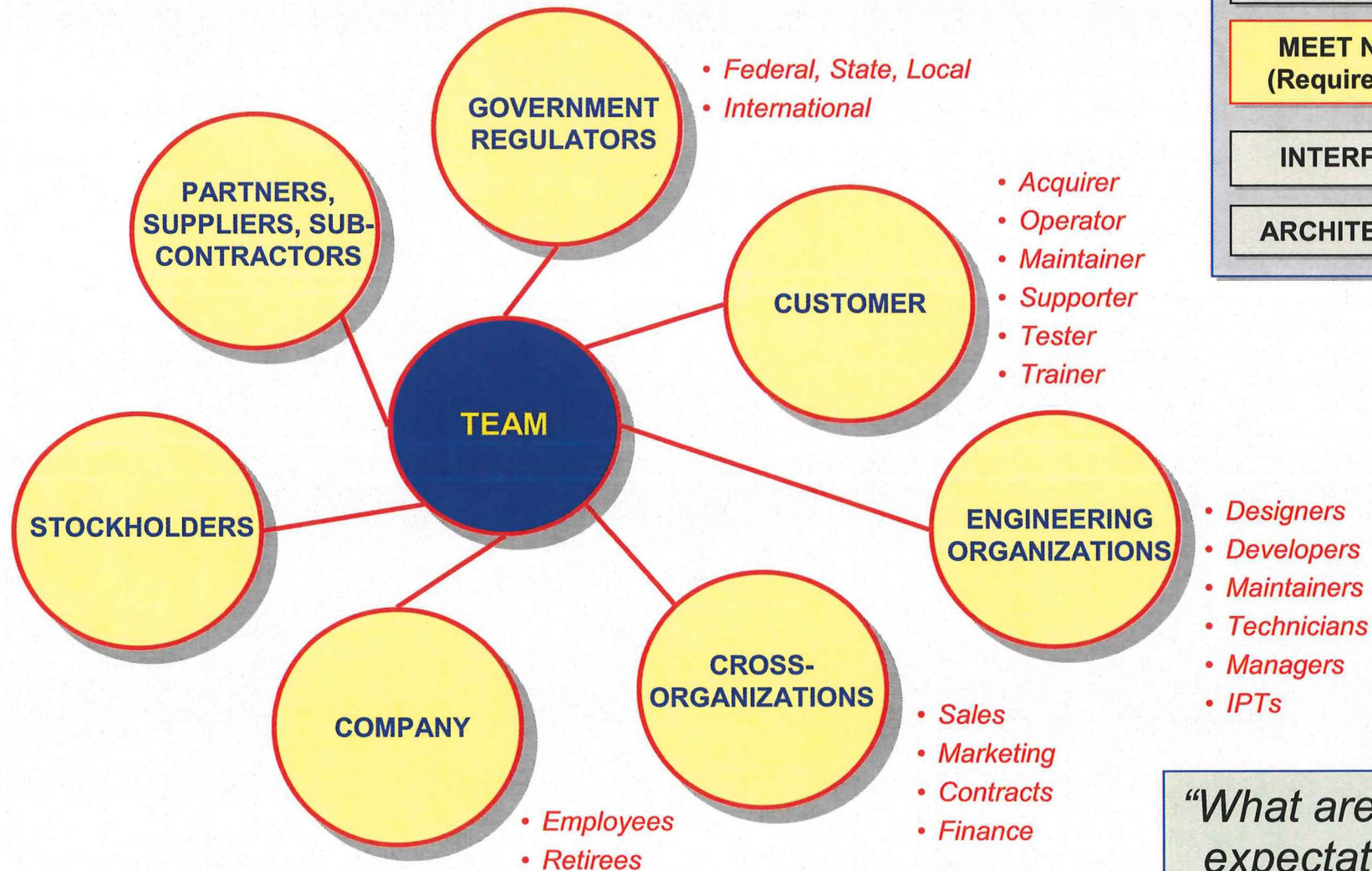
- ☐ Transparency is promoted (no hidden agendas).
- ☐ Members admit weaknesses and mistakes.
- ☐ Apologies are offered and accepted without hesitation.
- ☐ Credibility and competence are highly valued.
- ☐ Support from upper management is vital.

Morale

- ☐ Managed conflict is OK. Mutual respect allows exchange of ideas without fear.
- ☐ Strong sense of pride and satisfaction.
- ☐ Commitment to continuous improvement.
- ☐ Caring relationships among members.
- ☐ Members work hard and play hard.
- ☐ Successes are celebrated.

Stakeholders

■ Who are the “Stakeholders” of the Team?



“What are their expectations?”

Satisfying Stakeholder Expectations

■ Checklist: How does each of the stakeholders define value?

Customer

- ☐ Quality product
- ☐ Cost
- ☐ Schedule
- ☐ Good service

Company, Partners, Suppliers

- ☐ Revenue
- ☐ Growth
- ☐ Profits
- ☐ Return customers

Worker

- ☐ Compensation
- ☐ Fulfillment (contribution, learning, balance)
- ☐ Job security and health benefits
- ☐ Manager/leader integrity

Community

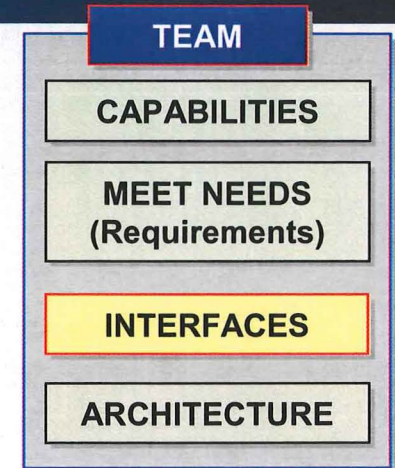
- ☐ Prestige
- ☐ Donations or support to local programs
- ☐ Tax revenue

Stakeholder

- ☐ Return on investment (ROI)

- *Focus on developing and maintaining good stakeholder **relationships***
- *Develop requirements that meet their needs*

Interfaces



- Interfaces are *relationships* between elements of a system (internal) or between two systems (external).
- Interfaces can be physical (attachments, connections, keep-out volumes, etc.) or functional (includes electrical, software, radio-frequency, etc.)

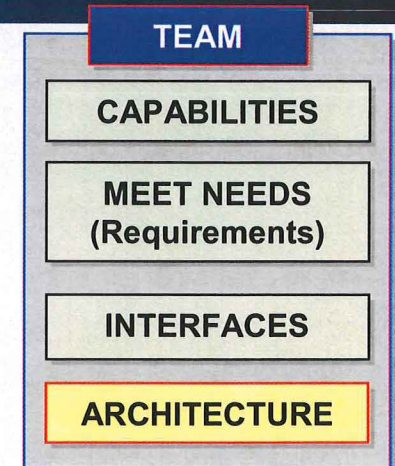
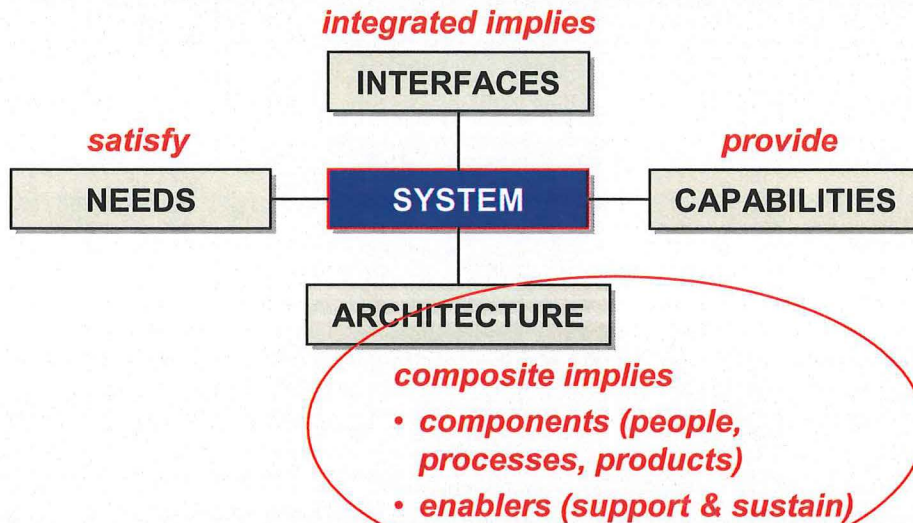
(source: Space & Missile Systems Center, "Systems Engineering Primer & Handbook")

- Interfaces of High Performance Teams are *communication*:
 - ☐ Internal communication within the team (responsibility, accountability, authority)
 - ☐ External communication outside of the team (contacts, methods, frequency)
 - ☐ *Requirements management* (flow-down, change control, etc.)

Formally establish and control team interfaces

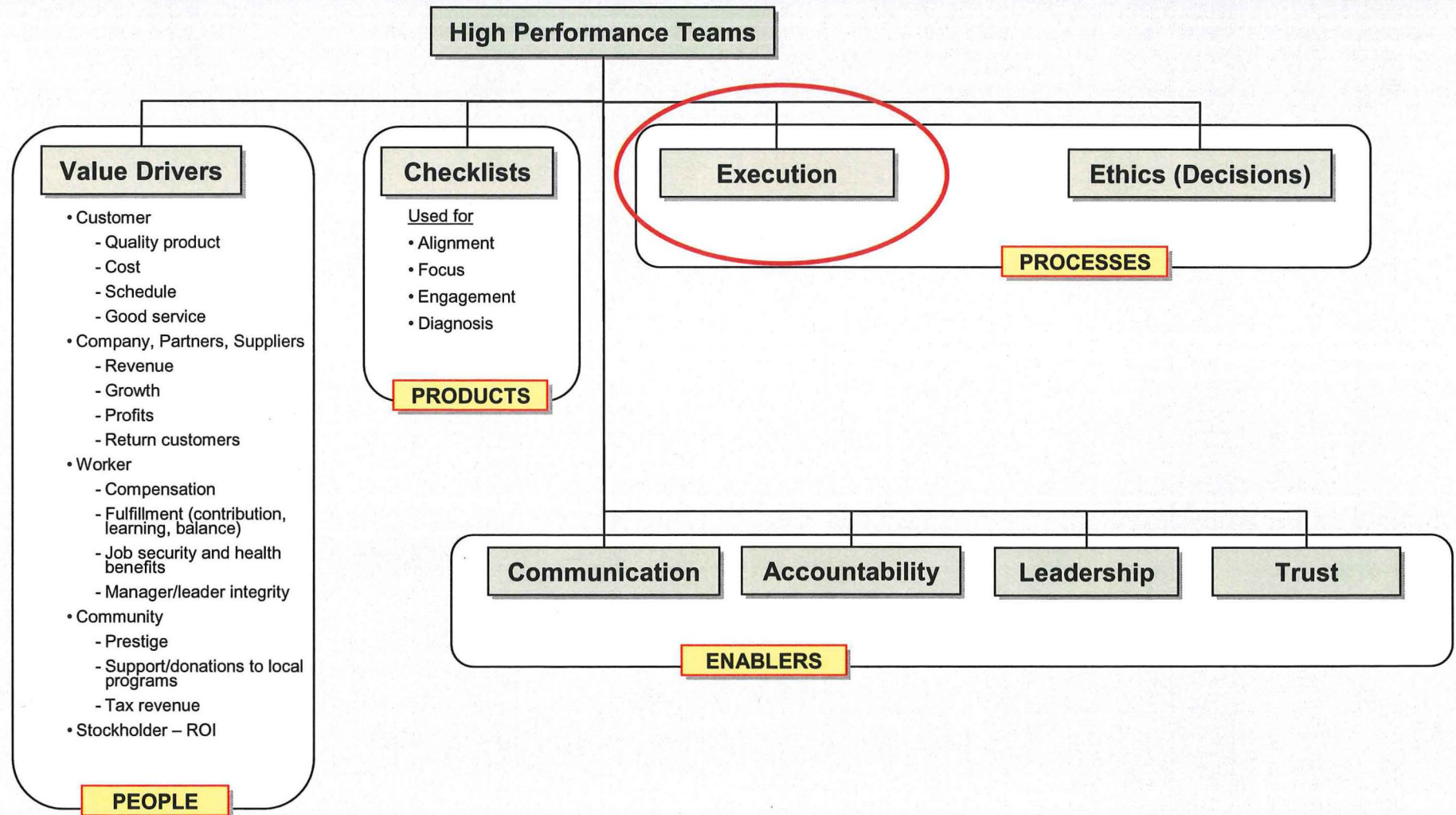
High Performance Framework

Recalling the elements of a system:

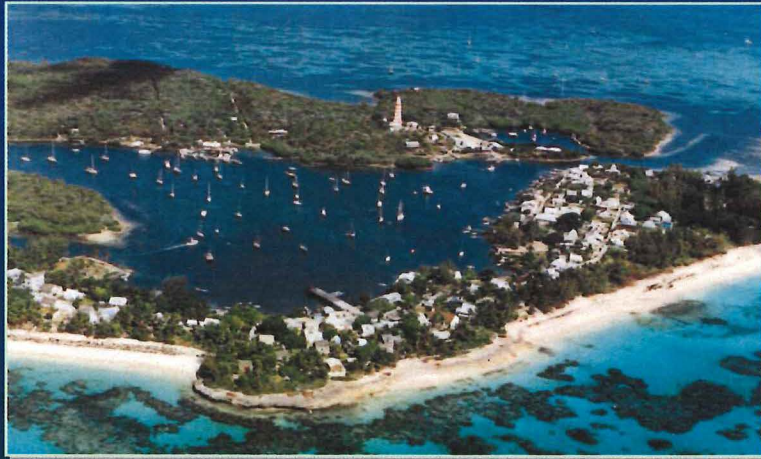


- An architecture provides a standardized way to describe complexity in a structured and decomposed manner.
- It describes the structure of the overall “system”, composed of **people**, **processes**, **products**, and **enablers**.
- The primary purpose of an architecture is to inform, guide, and constrain the decisions for the team and its leaders.

High Performance Framework

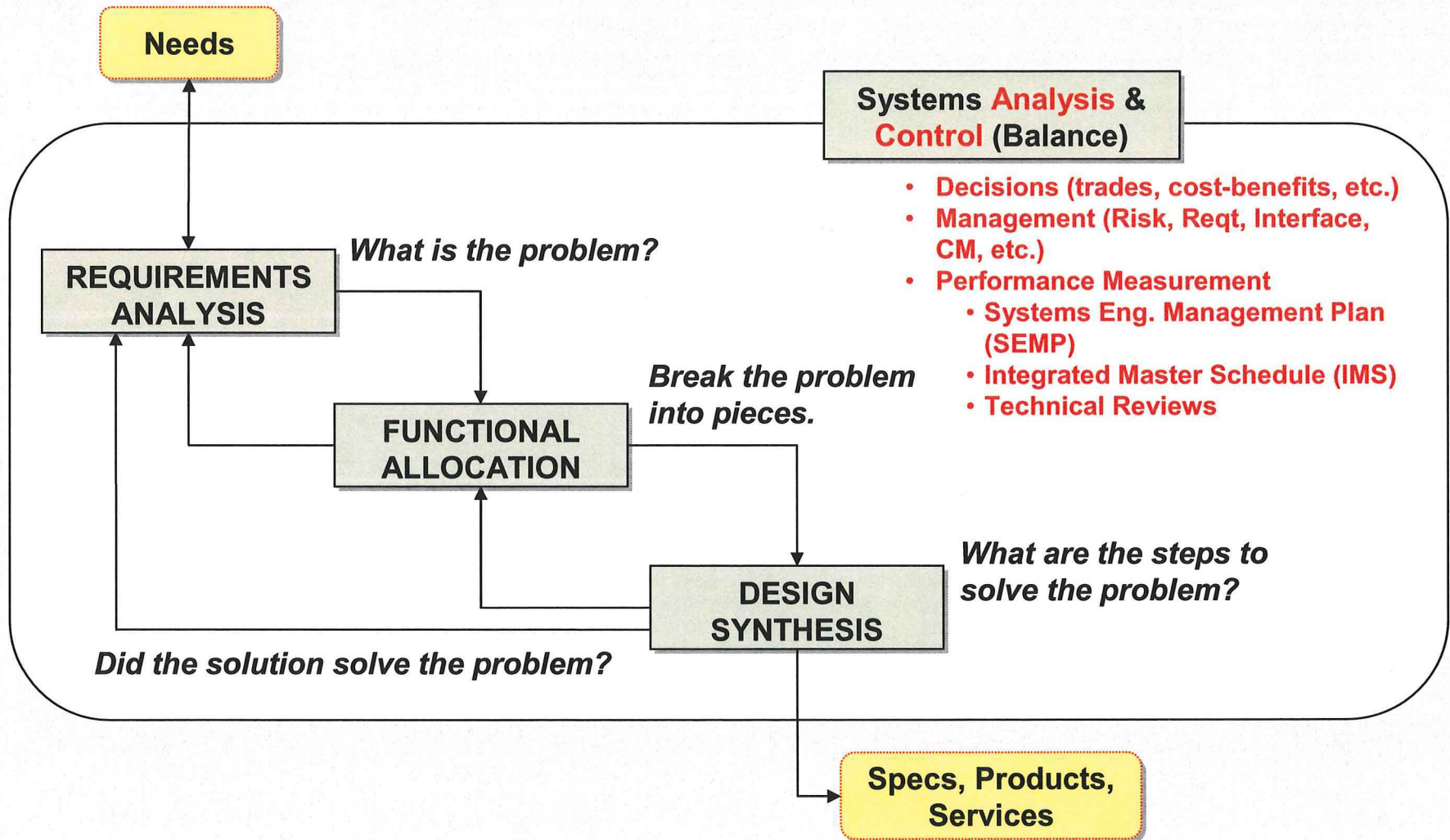


Execution: The Process to Build a Team...



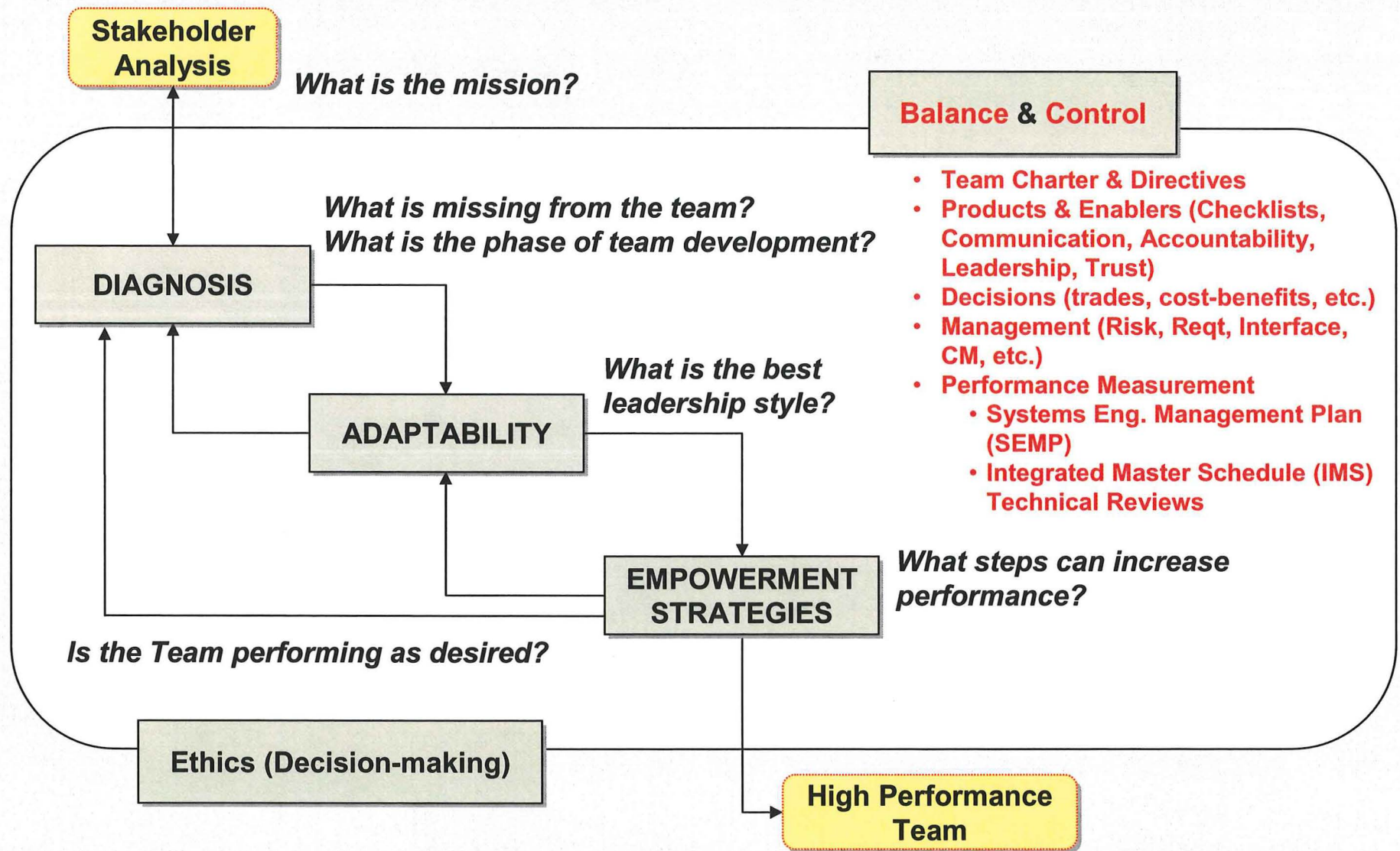
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Systems Engineering Process (SEP)

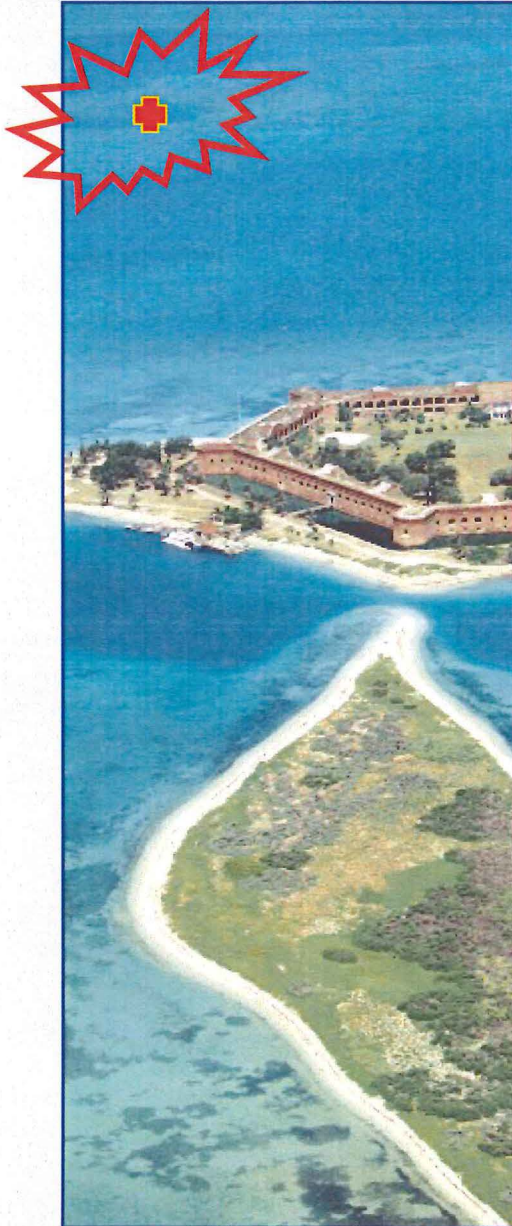


Adapted from EIA/IS-632 in "Systems Engineering Primer"
Space & Missiles Systems Center

SEP Adapted to High Performance Teams



Execution of Process



**Stakeholder
Analysis**

(1) **Create shared vision** of simple well-defined goals. Include desired characteristics of high performance.

(2) **Identify gaps** in the "as-is" state of the Team versus the desired characteristics of an HPT.

(3) **Determine phase** of Team development.

(4) **Adjust leadership style** to phase of Team development.

(5) **Empower Team Members** with strategies for high performance

Adapted from: Ken Blanchard,
"One-Minute Manager Builds
High Performing Teams"

EXECUTION

Create Vision

Identify Gaps

Determine Phase

Adjust Style

Empower Team

Create Shared Vision

EXECUTION

Create Vision

Identify Gaps

Determine Phase

Adjust Style

Empower Team

- A HPT shares a strong sense of purpose and a common set of values. They have a *compelling vision* that includes a purpose (*who you are*), a picture of the future (*where you are going*), and shared values (*what drives you there*).

(Ken Blanchard, *“Leading at a Higher Level”*)

■ Checklist: Create Shared Vision

- ☐ Clarity: brings understanding to the vision
- ☐ Connectedness: brings the past, present and future together
- ☐ Purpose: brings direction to the vision
- ☐ Goals: bring target to the vision
- ☐ Honesty: brings integrity and credibility to the vision
- ☐ Stories: brings relationships to the vision
- ☐ Challenge: brings stretching to the vision
- ☐ Passion: brings fuel to the vision
- ☐ Modeling: brings accountability to the vision
- ☐ Strategy: brings process to the vision

Shared vision helps build a sense of commitment.

(John C. Maxwell, *“17 Indisputable Laws of Teamwork”*)

Identify Gaps and Determine Phase

EXECUTION

Create Vision

Identify Gaps

Determine Phase

Adjust Style

Empower Team

- The traits of the existing team are captured.
- These traits are initially compared with the desired characteristics of high performing teams (see Checklist of Characteristics).
- The gaps in performance are analyzed and resolved.
- The *phase* of team development is determined
 - *based on existing traits, including productivity and morale, then*
 - *leadership style is adjusted to match the phase of team*

Determine Phase (continued)

Ken Blanchard, in his book *Leading at a Higher Level*, outlines four phases:

* compared to B.W. Tuckman,
*Developmental Sequence in
Small Groups*

	ORIENTATION	DISSATISFACTION	INTEGRATION	PRODUCTION
Major Trait*	"Forming"	"Storming"	"Norming"	"Performing"
Characteristics	<ul style="list-style-type: none"> • Getting to know each other. • Dependent on authority for direction & support. 	<ul style="list-style-type: none"> • Conflict emergence and resolution. • Confusion and frustration in roles & goals. 	<ul style="list-style-type: none"> • Working together to accomplish the mission. • Growing trust. 	<ul style="list-style-type: none"> • Focused on task resolution & implementation. • Empowerment. • High morale.
Issues	<ul style="list-style-type: none"> • Acceptance • Trust 	<ul style="list-style-type: none"> • Power & control • Conflict 	<ul style="list-style-type: none"> • Sharing control • Avoiding conflict 	<ul style="list-style-type: none"> • New challenges • Improvement
Individual	<ul style="list-style-type: none"> • Enthusiastic beginner 	<ul style="list-style-type: none"> • Disillusioned learner 	<ul style="list-style-type: none"> • Capable but cautious performer 	<ul style="list-style-type: none"> • Self-reliant achiever
Needs	<u>Directing</u> <ul style="list-style-type: none"> • Low support • High direction 	<u>Coaching</u> <ul style="list-style-type: none"> • High support • High direction 	<u>Supporting</u> <ul style="list-style-type: none"> • High support • Low direction 	<u>Delegating</u> <ul style="list-style-type: none"> • Low support • Low direction
Leader Styles**	<ul style="list-style-type: none"> • Visionary • Commanding 	<ul style="list-style-type: none"> • Coaching • Pacesetting 	<ul style="list-style-type: none"> • Affiliative 	<ul style="list-style-type: none"> • Democratic

** compared to D. Goleman,
Primal Leadership – see
next slides

Adjust Leadership Style

EXECUTION

Create Vision

Identify Gaps

Determine Phase

Adjust Style

Empower Team

■ *What do effective leaders do?*

- ☐ Set strategy and create mission
- ☐ Lead through vision, and by example
- ☐ Project enthusiasm and passion
- ☐ Build relationships
- ☐ Resolve conflict

■ *But what should leaders do?*

- ☐ Focus on performance
- ☐ Not on activities, chemistry, togetherness

■ *What about leaders in HPTs?*

- ☐ The formal role remains, but
- ☐ The leader is more evident for what he does not do, than what he does

“As for the best leaders, the people do not notice their existence...when the best leader’s work is done, the people say ‘We did it ourselves.’”

*Lao Tzu
Chinese philosopher
500 B.C.*

Leadership is allowed to shift as needed, and is often shared based on the situation. Various styles are employed.

Adjust Leadership Style (continued)

Daniel Goleman, in his book *Primal Leadership*, outlines six styles:

	Commanding	Visionary	Pacesetting	Coaching	Affiliative	Democratic
Major Trait	Demands immediate compliance	Mobilizes people toward a vision	Sets high standards for performance	Develops people for the future	Creates harmony and builds emotional bonds	Forges consensus through participation
Phrase	"Do what I tell you"	"Come with me"	"Do as I do, now"	"Try this"	"People come first"	"What do you think?"
Competencies	Drive to achieve, initiative, self-control	Self-confidence, empathy, change catalyst	Conscientiousness, drive to achieve, initiative	Developing others, empathy, self-awareness	Empathy, building relationships, communion	Collaboration, team leadership, communication
Works Best	In a crisis, to kick start a turnaround, or with problem employees	When changes require a new vision, or when a clear direction is needed	To get quick results from a highly motivated and competent team	To help an employee improve performance or develop long-term strengths	To heal rifts in a team or to motivate people during stressful circumstances	To build buy-in or consensus, or to get input from valuable employees
Overall Impact	Negative	Most strongly positive	Negative	Positive	Positive	Positive

The most effective leaders master at least four styles, and switch fluidly between them, as needed.

Empower the Team with Success Strategies

EXECUTION

Create Vision

Identify Gaps

Determine Phase

Adjust Style

Empower Team

- Empowerment involves gradually turning over responsibility for direction and support to the team.

(Ken Blanchard, *"One Minute Manager"*)

- **Checklist:** Strategies for Higher Performance

- ☐ Base team decisions, priority, and operation on the vision.
- ☐ Determine and focus on those things that add value to critical-success stakeholders.
- ☐ Create a value stream map of the "as-is" and "to-be" states. Plan activities and eliminate waste.
- ☐ Help all members to see the "Big Picture", understanding the needs of internal as well as external customers.
- ☐ Maintain alignment and remove obstacles blocking the flow of value. Instead of pushing the products of value, pull them with a steady rhythm.
- ☐ Regularly measure and review progress against goals.
- ☐ Emphasize communication and mutual accountability.
- ☐ Retain flexibility to adjust for uncertainties.
- ☐ Promote perfection through continuous improvement.
- ☐ Give members ownership of process. Ask them for suggested improvements.
- ☐ Produce early successes, then celebrate them.

Team Enablers...



- ☒ *Project Objectives*
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ENABLERS

COMMUNICATION

ACCOUNTABILITY

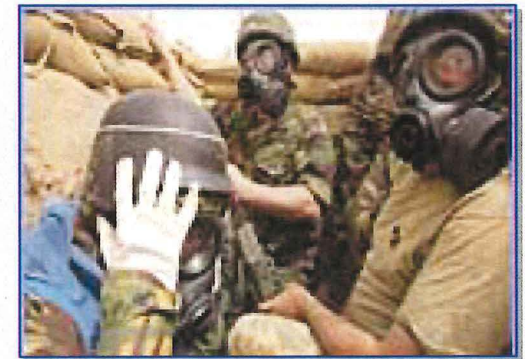
LEADERSHIP

TRUST

- If you have ever been on a team where teammates never let one another know what's going on, then you know how frustrating poor communication can be.
(John C. Maxwell, *"17 Indisputable Laws of Teamwork"*)

■ Checklist: Communication

- ☐ Repeatedly broadcast the common purpose.
- ☐ Set performance goals for all to see. Channels include the SEMP, IMS, TEMP and Program Directives (Team Charter, etc).
- ☐ Use plans to promote the alignment of members.
- ☐ Share the "Big Picture", and ensure it is flowed down.
- ☐ Engage in active listening. Validate what you are hearing through feedback.
- ☐ Create an open and safe environment.
- ☐ Understand and resolve cultural barriers.
- ☐ Provide all members with access to a common database.
- ☐ Embed systems engineers in cross-functional teams (software, etc.) – put them in the trenches.



ENABLERS

COMMUNICATION

ACCOUNTABILITY

LEADERSHIP

TRUST

■ Successful teams share leadership responsibilities and hold all team members accountable for team performance

- Encourages team members to (1) share issues and concerns with the group and (2) maintain open communication.
- Team members support changes in work assignments, resources, and priorities when they realize it will aid in the team's performance.

(John Kotter, *"Leading Change"*)

■ Checklist: Accountability

- ☐ Define roles, responsibility, authority. Channels include the SEMP, IMS, TEMP and Program Directives (Team Charter, etc).
- ☐ Demand requirement ownership. Assign and hold accountable individuals.
- ☐ Measure and verify successes through key metrics.
- ☐ Conduct regular progress reviews.
- ☐ Share responsibility and be mutually accountable.

ENABLERS

COMMUNICATION

ACCOUNTABILITY

LEADERSHIP

TRUST

■ **Checklist:** *Adjust leadership style to situation (Team phase or individual development)*

- ☐ Commanding ☐ Democratic
- ☐ Visionary ☐ Pacesetting
- ☐ Affiliative ☐ Coaching

■ **Checklist:** *Leadership actions*

- ☐ Set strategy and create vision
- ☐ Lead through vision, and by example
- ☐ Project enthusiasm and passion
- ☐ Build relationships
- ☐ Resolve conflict
- ☐ Focus on performance, produce results

■ **Checklist:** *Emotional Quotient*

- ☐ Self-awareness
- ☐ Self-management
- ☐ Social awareness
- ☐ Relationship management (up, across, down, and external)

“Self-confidence, and self-control; commitment and integrity; the ability to communicate and influence, to initiate and accept change--these competencies are at a premium in today's job market.”

Daniel Goleman

“Working with Emotional Intelligence”

ENABLERS

COMMUNICATION

ACCOUNTABILITY

LEADERSHIP

TRUST

■ The first job of a leader is to inspire trust

- *The ability to establish, grow, extend, and restore trust with all stakeholders (customers, business partners, investors, and coworkers) is the key leadership competency of the new global economy.*

(Stephen M.R. Covey, “Speed of Trust”)

■ Low trust has a negative impact on decisions, communications, and relationships.

■ On the other hand, the key to building trust is “results”.

- *Results build loyalty. “What one factor wins more systems jobs than any other?” The answer: **comfort**. (Dr. Fred Brown, LMU)*
- *Results satisfy customers and other stakeholders, causing these customers to become your best promoters.*

■ **Checklist:** Essential Elements of Trust

- ☐ Credibility (Character) - integrity, motive, and intent
- ☐ Competence - capabilities, skills, results, and track record
- ☐ Empathy - best tool of a SE; understand and convey the position of another
- ☐ Transparency - more eyes ensure mistakes are caught early
- ☐ Empowerment (support of upper management) – environment of trust

Ethics and Team Decisions...



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Ethics: A Decision-Making Process

- Ethics is simply decision-making; it is “doing the right thing”.
(Professor John Stupar, LMU)
- Resolve ethical conflict by considering:
 - Fundamental Principles (being honest and impartial)
 - Fundamental Duties to Society and Public Infrastructure (guard the public)
 - Rules of Practice (useful guidelines – respect others, etc.)
- A Code of Ethics provides a leader with a framework for making moral decisions and resolving ethical dilemmas.
- **Checklist:** Essential Elements of Ethics
 - ☐ “Do the right thing”
 - ☐ Employ ethical theories for solutions (view through lenses of *Rights*, *Justice*, *Utility* and *Virtue*)
 - ☐ Resolve ethical conflict by considering fundamental principles, duties, and practices
 - ☐ Code of Ethics for Systems Engineering Leader

Ethics (continued)

- What constitutes a Code of Ethics for a leading Systems Engineer/Manager?

- **Checklist: Kevin Buie Code of Ethics**

As a Systems Engineer, Leader, and Manager fulfilling my professional duties:

- ☐ I shall hold paramount the safety, health, and welfare of the public, striving to protect the environment and utilize principles of sustainable development
- ☐ I shall perform services only in the areas of my competence, to the best of my ability, and accept responsibility for the outcome of these services.
- ☐ I shall act legally, honorably, honestly, justly, and responsibly, as well as respect the trust and privileges granted me.
- ☐ I shall provide products with a well-founded belief that they are safe, meet specification, pass appropriate tests, do not diminish privacy, quality of life, or harm the environment. The ultimate effect of the product should be to the public good.
- ☐ I shall implement good project management, including effective procedures for accuracy of estimates, promotion of quality and reduction of risk.
- ☐ I shall promote teamwork, treating fairly and respectfully all peers, supervisors, employees, and clients, recognizing their unique capabilities and contributions.
- ☐ I shall continue my professional development, and promote the understanding, implementation and acceptance of good Systems Engineering & Management practices

Conclusions...

Dry Tortugas, Florida Keys



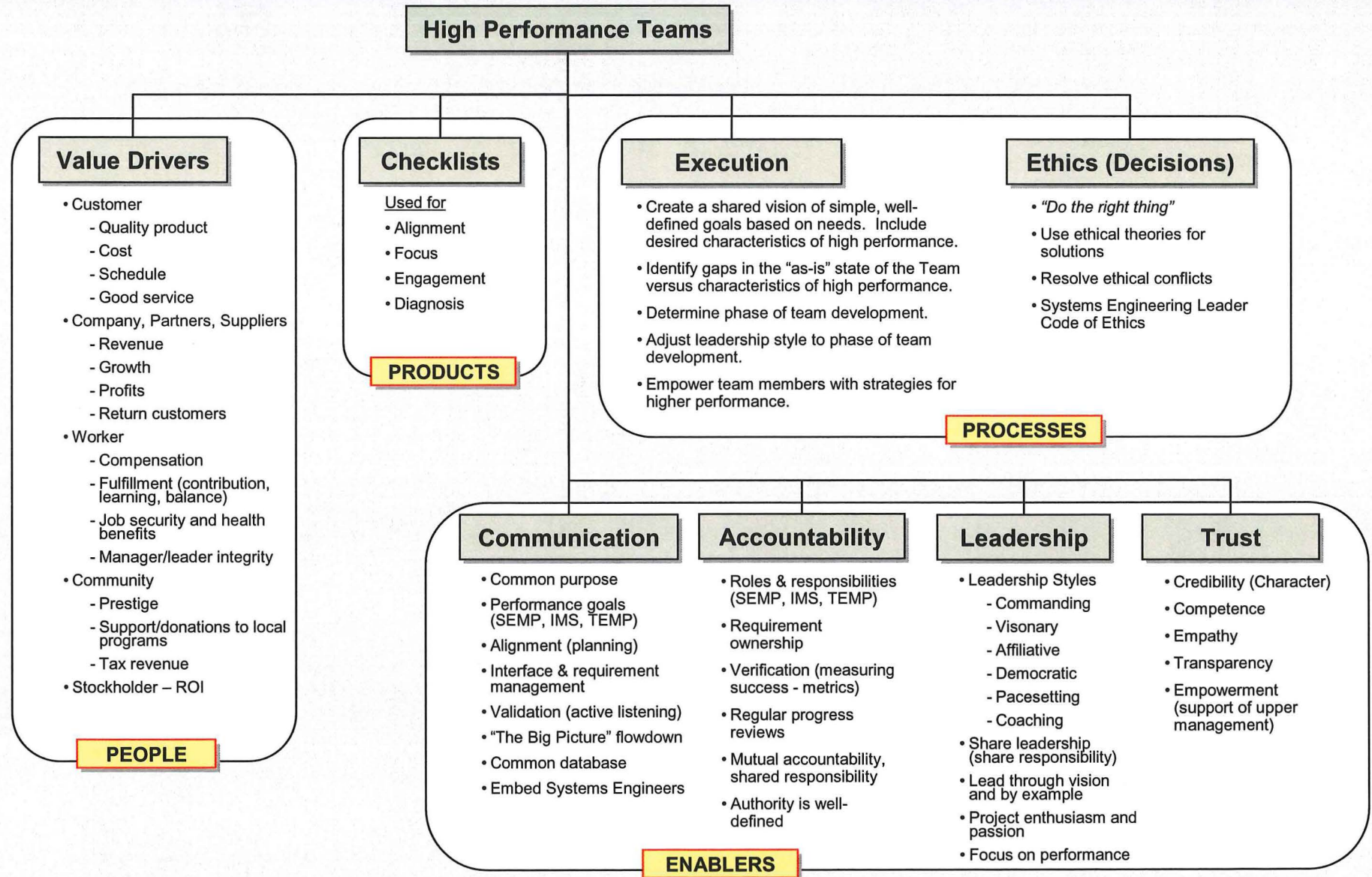
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Project Objectives Met:

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- ☑ Develop a Code of Ethics for a leading Systems Engineer/Manager.

Employ the following High Performance Framework as an architecture to inform, guide, and constrain the decisions of Team and its leaders.

High Performance Framework



Conclusions (continued)

Enhance activities that lead to *high performance*:

☑ Value, Vision and Execution

- stress a “Big Picture” view, understanding value for all stakeholders
- plan and measure performance based on simple well-defined goals

☑ Communication and Accountability

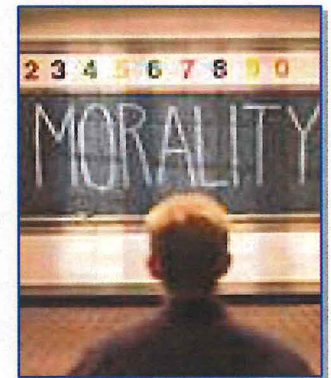
- set roles, responsibility, and authority
- embrace mutual accountability

“Always do right. This will gratify some and astonish the rest.”
Mark Twain

☑ Strong Leadership and Trust

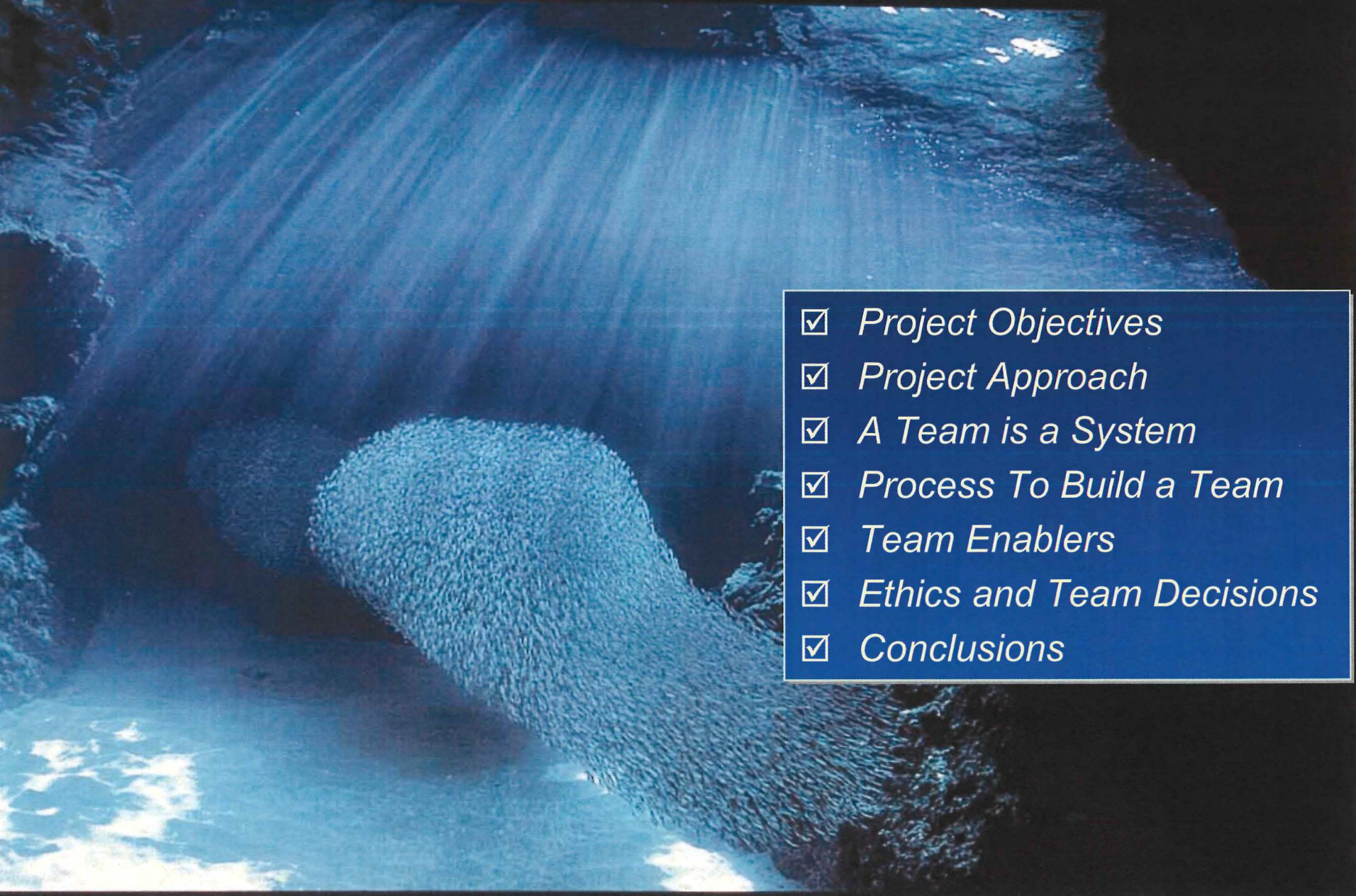
- be flexible, and share leadership when needed
- exercise empathy, patience and active listening

☑ Empower Continuous Improvement



Add value to others, set an example, pass these skills to others, and “do the right thing”.

Any Questions...?

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- ✓ *Project Objectives*
 - ✓ *Project Approach*
 - ✓ *A Team is a System*
 - ✓ *Process To Build a Team*
 - ✓ *Team Enablers*
 - ✓ *Ethics and Team Decisions*
 - ✓ *Conclusions*

References

- Professor Karen Miller, *Systems Engineering*, course lecture slides & notes (LMU 2005)
- Professor Arnold Galloway, *Advanced Systems Engineering*, course lecture slides & notes (LMU 2006)
- Professor Bo Oppenheim, *Lean Engineering*, course lecture slides & notes (LMU 2006)
- Professor Barry Molnaa, *Program Management*, course lecture slides & notes (LMU 2006)
- Professor Bo Oppenheim, *Quality*, course lecture slides & notes (LMU 2006)
- Professor Charles Tang, *Systems Architecture*, course lecture slides & notes (LMU 2007)
- Professor Bo Oppenheim, *Systems Seminar*, course lecture slides & notes (LMU 2007)
- Professor John Stupar, *Ethics in Engineering*, course lecture slides & notes (LMU 2007)
- Professor Arnold Galloway, *Case Studies*, course lecture slides & notes (LMU 2007)
- EIA/IS 632, *Systems Engineering*, Interim Standard, December 1994.
- Sage, A. "Systems of Systems: Architecture Based Systems Design and Integration" slides, 10 October 2005 (source: http://ieeesmc2005.unm.edu/smc_keynote_sage.pdf).
- George Bratt, *The New Leaders 100-Day Action Plan* (Jon Wiley & Sons, 2006). ISBN 0-471-78977-1.
- Space and Missile Systems Center (SMC), *Systems Engineering Primer & Handbook* (3rd Edition). 29 April 2005.
- Oliver Wight, *ABCD Checklist for Operational Excellence* (John Wiley & Sons, 2006). ISBN 0-471-38819-X.

References (continued)

- Ken Blanchard, *One Minute Manager Builds High Performance Teams* (Morrow, 2000). ISBN 0-688-17225-6.
- Ken Blanchard, *Leading at a Higher Level* (Pearson Prentice Hall, 2007). ISBN 0-13-234772-5.
- John C. Maxwell, *The 17 Indisputable Laws of Teamwork* (Nelson Books, 2001). ISBN 0-7852-7434-0.
- B.W. Tuckman, Developmental Sequence in Small Groups, *Psychological Bulletin*, 1965, Vol.63, No. 6, 384-399.
- Daniel Goleman, *Primal Leadership* (Harvard Business School Publishing, 2002). ISBN 1-57851-486-X
- Jon Katzenbach and Douglas Smith, *The Wisdom of Teams* (Harper Business, 2003). ISBN 0-06-052200-3
- John Kotter, *Leading Change* (Harvard Business School Press, 1996). ISBN 0-87584-747-1.
- Daniel Goleman, *Working with Emotional Intelligence* (Random House, 2000). ISBN 0-553-37858-9.
- Stephen M.R. Covey, *The Speed of Trust* (Free Press, 2006). ISBN 978-0-7432-9730-1.
- Mike Martin and Roland Schinzinger, *Ethics in Engineering* (McGraw Hill, 2005). ISBN 0-07-283115-4.
- <http://www.incose.org/>