

Exclusive Preview Webinar for CAB Members Re: Tuition Benefit Engineering Process Quality (EPQ): Its Values and Supporting Ethics

October 15, 2026



Presented by:
Dr. Larry Kennedy, CEO
Quality Management Institute
Chair, SEQM WG



QM Micro-Credential

The QM Micro-Credential is the "quality awareness" module of all QMI certifications. It is intended for wide application to those in the support culture. It explains the role that the quality function plays in developing a successful system product and will increase the knowledge-base and situational awareness of every team member.

The CAB Tuition-Free Options

Systems Engineering Quality Manager Certification

SEQM Part 1: Engineering Process Quality (EPQ)

Process Ethics, QM Methods, Systems Thinking Tools

SEQM Part 2: Engineering Management and Leadership (EML)

Administration, Leadership, and Team-Building

SEQM Part 3: Project Demonstrating Excellence (PDE)

Applying Work Process Analysis to Demonstrate Competency

Information Technologies Quality Manager Certification

ITQM Part 1: Digital Systems Process Quality (DSPQ)

Process Ethics, QM Methods, Systems Thinking Tools

ITQM Part 2: Digital Systems Management and Leadership (DSML)

Administration, Leadership, and Team-Building

ITQM Part 3: Project Demonstrating Excellence (PDE)

Applying Work Process Analysis to Demonstrate Competency

[Link to INCOSE SEQM and Micro-Credential Site](#)

How to enroll in the QMI-INCOSE Exclusive CAB Tuition-Free Program

Please send an email from your company email address to the CAB Coordinator.
tomi.okey@incose.net Your email must include the following:

- A. Your first and last name as you would want it displayed in your curriculum transcript
- B. A personal telephone contact number for use by QMI's enrollment team.
- C. The specific course name/certification in which you are enrolling. (SEQM or ITQM Professional Certification; or the QM-Micro Credential; or a standalone EPQ or DSPQ Certificate Course)

Your enrollment request will be forwarded to the Quality Management Institute. You will then receive an email confirming your enrollment and with a link to the self-paced training. You will also receive a link to the CAB-exclusive monthly discussion group on the third Wednesday of each month at 10:00 AM ET.



A Quality Culture Delivers

- What the customer wants, needs and/or expects.
- Reasonable expectations of feeling safe and secure.
- A perception of trust and reliability in the promises.





THE ROOTS OF **SYSTEMS QUALITY**

AEROSPACE AND MISSILE SYSTEMS



SYSTEMS QUALITY PRINCIPLES BORN IN AEROSPACE



MISSION FOCUS

Every system exists to achieve a critical objective.



INTERCONNECTED RELIABILITY

Every part impacts the others—and the success of the mission.



DESIGNED FOR EXCELLENCE

Built with precision, tested rigorously, and improved continuously.



PERFORMANCE UNDER PRESSURE

Engineered to perform when it matters most.



SYSTEMS THINKING. GLOBAL IMPACT.

From space to Earth, strong systems create a better world.

★ **SYSTEMS QUALITY** MAKES IT POSSIBLE ★

Technological Super-Systems



Applied Super-Systems Vision

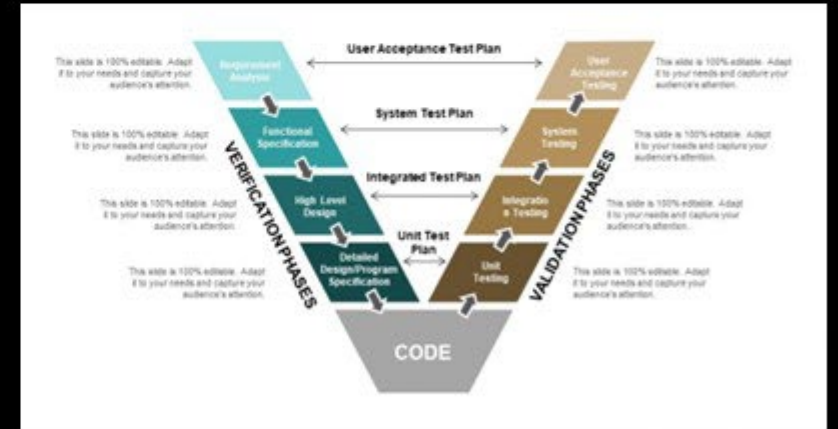
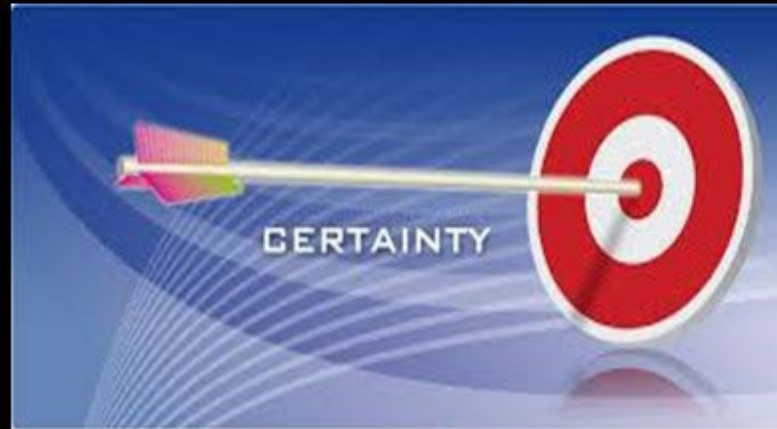
The Amazon logo, featuring the word "amazon" in a white, lowercase, sans-serif font on a dark grey background. A curved orange arrow is positioned below the text, pointing from the letter 'a' to the letter 'z'.The Mayo Clinic Health System logo, which includes a stylized icon of three interlocking shields to the left of the text "MAYO CLINIC" and "HEALTH SYSTEM" stacked vertically in a white, serif font on a dark blue background.The Walmart logo, consisting of the word "Walmart" in a white, sans-serif font on a blue background, with a yellow six-pointed starburst icon to the right. Below the word is the tagline "Save money. Live better." in a smaller white font.The Alibaba.com logo, featuring an orange stylized 'A' icon above the text "Alibaba.com" in a bold orange font, with the tagline "Global trade starts here.™" in a smaller black font below it, all on a white background.The Whole Foods Market logo, with the words "WHOLE FOODS" in a large, white, serif font above the word "MARKET" in a smaller, white, sans-serif font, all on a dark green background.The Microsoft logo, featuring the four-pane Windows logo (red, green, blue, yellow) to the left of the word "Microsoft" in a white, sans-serif font, all on a blue background.The UnitedHealthcare logo, which includes a stylized icon of three vertical bars to the left of the text "UnitedHealthcare" and "Healing health care. Together.™" stacked vertically in a white, sans-serif font on a blue background.The Costco Wholesale logo, featuring the word "COSTCO" in a large, bold, red, sans-serif font above the word "WHOLESALE" in a smaller, bold, blue, sans-serif font, with three horizontal blue lines above "WHOLESALE", all on a white background.The Airbus logo, consisting of the word "AIRBUS" in a bold, blue, sans-serif font on a white background.

Promises of
Performing at
Higher Levels
in Complex
Super-Systems

Failure to Properly
Apply Metrics

Racing Past the
Facts to Get
to an Outcome

Methods and Technology With Promise



The Promise of Increased Certainty and Profitability

Promises of
Performing at
Higher Levels
in Complex
Super-Systems

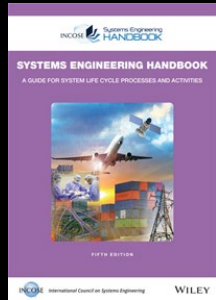
Agile Properly
Implemented
Provides
Accelerated
and Reliable
Development
Process



**The Data Indicates Culture and Process
are the Root Causes of Lost Profits
NOT the Development Method**

DEVELOPMENT METHOD	PROJECT SIZE	SUCCESS RATE
Agile	All Sizes	39%
Waterfall	All Sizes	11%
Agile	Large	18%
Waterfall	Large	3%
Agile	Small	58%
Waterfall	Small	44%

The Standish Group Chaos Manifesto



Process Ethics Assure Systems Quality

The INCOSE Systems Engineering Handbook, Fifth Edition emphasizes the definition and management of SE processes. It provides an authoritative reference to understand the SE discipline in terms of content and practice.

In Sections 2.3.3.5 (Pages 63-66) and 2.3.4.8 (Pages 98-100), it reviews the history and practice of Quality Management and the work of the Quality Management Institute (QMI) that defines the process ethics to support a high-performing QM work culture.

The SEH states that “Kennedy leverages Deming’s mandate and the work of Crosby by defining the Eight Attributes of a Quality Management Culture.” They are “identifiable attributes or values within an organization's leadership style and workforce that directly influence the reliability of outputs”.



Super-System Vulnerabilities

Competency - Ethics - Accountability

STATE OF THE AMERICAN WORKPLACE

EMPLOYEE ENGAGEMENT INSIGHTS FOR U.S. BUSINESS LEADERS

GALLUP POLL

Los Angeles Times BUSINESS

LOCAL U.S. WORLD BUSINESS SPORTS ENTERTAINMENT HEALTH LIVING TRAVEL
Most workers hate their jobs or have 'checked out,' Gallup says

70% Disengaged or
Actively Disengaged

HATE THEIR JOBS



Engaged
31-33%



Disengaged
51-53%



Actively Disengaged
15-17%

Zero Defects Attitude



Attitude of the Heart



- **Pride of Workmanship**
- **Not Expecting Perfection**
- **Always Keeping our Promises**

Zero Defects Attitude



- A Quality Manager Keeps the Promise Made to Each Customer With a Zero Defects Attitude

Super-System Vulnerabilities

Competency - Ethics - Accountability



Lack Math Skills

Logic, Comparative
Analysis, Critical Thinking

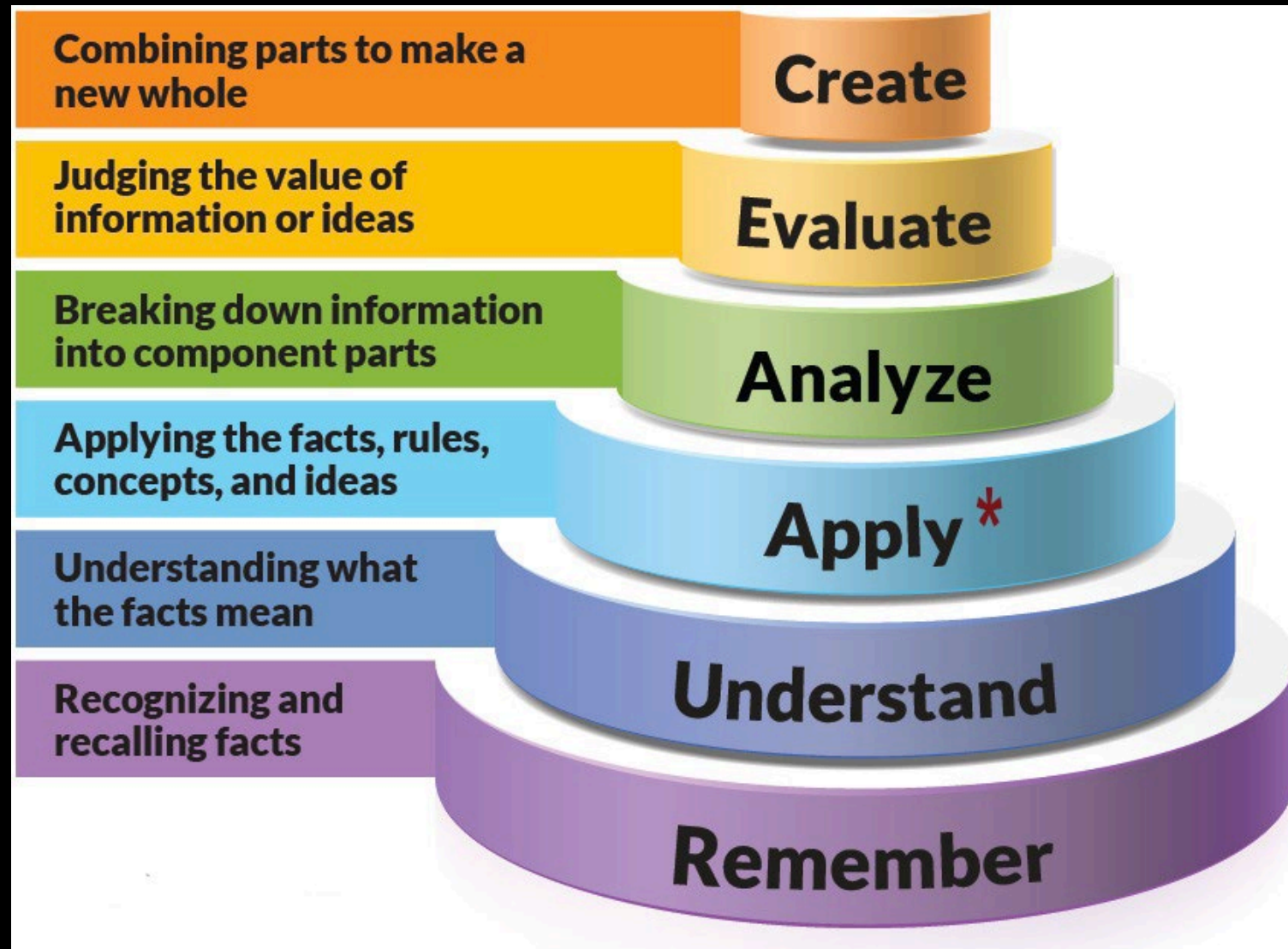
Reading and Literacy

Written Communications,
Reading Comprehension

Documentation

Protocols, Agendas,
Presentations, Agile

Bloom's Taxonomy



Vocational Certainty



➤ Quality of Our Products and Services



➤ Quality of Our Work Life

Are You Equipped?

- Talent
- Education
- Training
- Experience
- Personality
- Character



Vocational Certainty

- Faithful to the Work and Career Agenda
- Knowledge, Facts, and Experience
- Real Life vs Theoretical Cases
- Relevant Insights and Ideas
- Committed to Testing



Without Vocational Certainty

- Guessing What to Do Next
- Avoiding Accountability



Handoff of Work Product Across the Engineering Process

Clear Communication. Defined Interfaces. Shared Responsibility. Successful Outcomes.



EVERY GREAT OUTCOME IS THE RESULT OF GREAT HANDOFFS



TEAMWORK. TRUST. TRANSITION.

Handoffs in Sports: Teamwork in Action

SOCCER: THE THROUGH PASS

Trust your teammate.
Know their position.
Deliver with precision.

FOOTBALL: THE HANDOFF

Timing and trust.
Protect the play.
Move the chains.

BASKETBALL: THE PASS

Read the play.
Make the pass.
Create the opportunity.

RELAYS: THE BATON

Speed the handoff.
Stay in your lane.
Keep the momentum.



STRONG HANDOFFS BUILD STRONG PROJECTS. STRONG PROJECTS BUILD STRONG RELATIONSHIPS.



Handoff of Work Product Across the Engineering Process

Clear Communication. Defined Interfaces. Shared Responsibility. Successful Outcomes.



EVERY GREAT OUTCOME IS THE RESULT OF GREAT HANDOFFS. TEAMWORK. TRUST. TRANSITION.

Handoffs in Sports: Teamwork in Action

SOCCER: THE THROUGH PASS



Trust your teammate.
Know their position.
Deliver with precision.

FOOTBALL: THE HANDOFF



Timing and trust.
Protect the play.
Move the chains.

BASKETBALL: THE PASS



Read the play.
Make the pass.
Create the opportunity.

RELAYS: THE BATON



Speed the handoff.
Stay in your lane.
Keep the momentum.



STRONG HANDOFFS BUILD STRONG PROJECTS. STRONG PROJECTS BUILD STRONG RELATIONSHIPS.



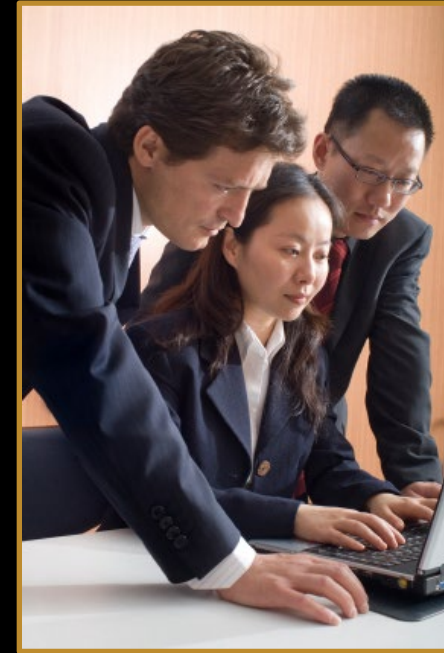
Everyone Has A Story . . .

. . . about supposedly reliable people and companies who have failed to keep their promise.



Everyone Has A Story . . .

If you are a manager or professional who must try to fulfill your promises to your customers through an employee's efforts . . .



. . . you will probably be challenged by the lack of knowledge, skills or ethics that you will engage in your career.

Everyone Has A Story . . .

. . . about supposedly
reliable people and
companies who have
failed to keep their
promise.

WHY?



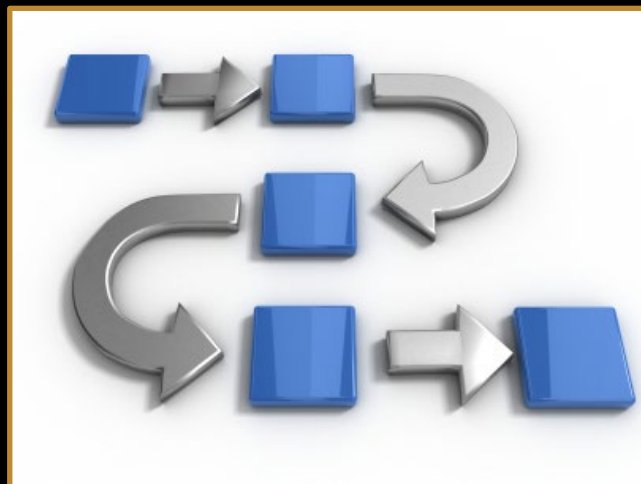
Everyone Has A Story . . .

. . . about supposedly reliable people and companies who have failed to keep their promise.

Processes
Ethics!



Process Ethics Must be Defined and Implemented to Assure Quality



Systems Principles



Quality Culture



Process Ethics

Quality Management



- **An Educational Technology with:**
 - **Systems**
 - **Methods**
 - **Language**
- **To Reach Your Business Goals**

Quality Management Foundations



- **QM Methods**
 - **QM Values**
 - **Reasonable Discussions**
-
- **Reasonable Standards for Designing, Building, and Implementing**
 - **Defining Risk and Process Ethics**

QM Process Ethics

Guide Us in Solving Problems



- **Learn the Facts and Then Apply Systems Thinking to Create Solutions**
- **Within the Scope of Our Authority**
- **Within Available Resources**

Definition of Ethic(s)



- **The Discipline Dealing with What is Good and Bad**
- **A System or Philosophy of Moral Values**

Definition of Wisdom

- **Wisdom is Knowledge of What Is True and Right Coupled with Good Judgment**
- **It is the Basis for Process Ethics**



Cost of Personal Ethics Failures



➤ Theft, Fraud
or Other
Criminal Acts,
Legal Liability,
and Moral
Responsibility

Cost of Process Ethics Failures



Cost of Process Ethics Failures



Conflicts, Job Dissatisfaction, Loss of Focus, Disengagement

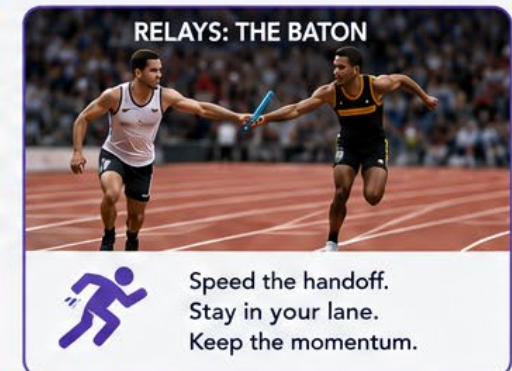
Handoff of Work Product Across the Engineering Process

Clear Communication. Defined Interfaces. Shared Responsibility. Successful Outcomes.



EVERY GREAT OUTCOME IS THE RESULT OF GREAT HANDOFFS. TEAMWORK TEST. TRANSITION.

Handoffs in Sports: Teamwork in Action



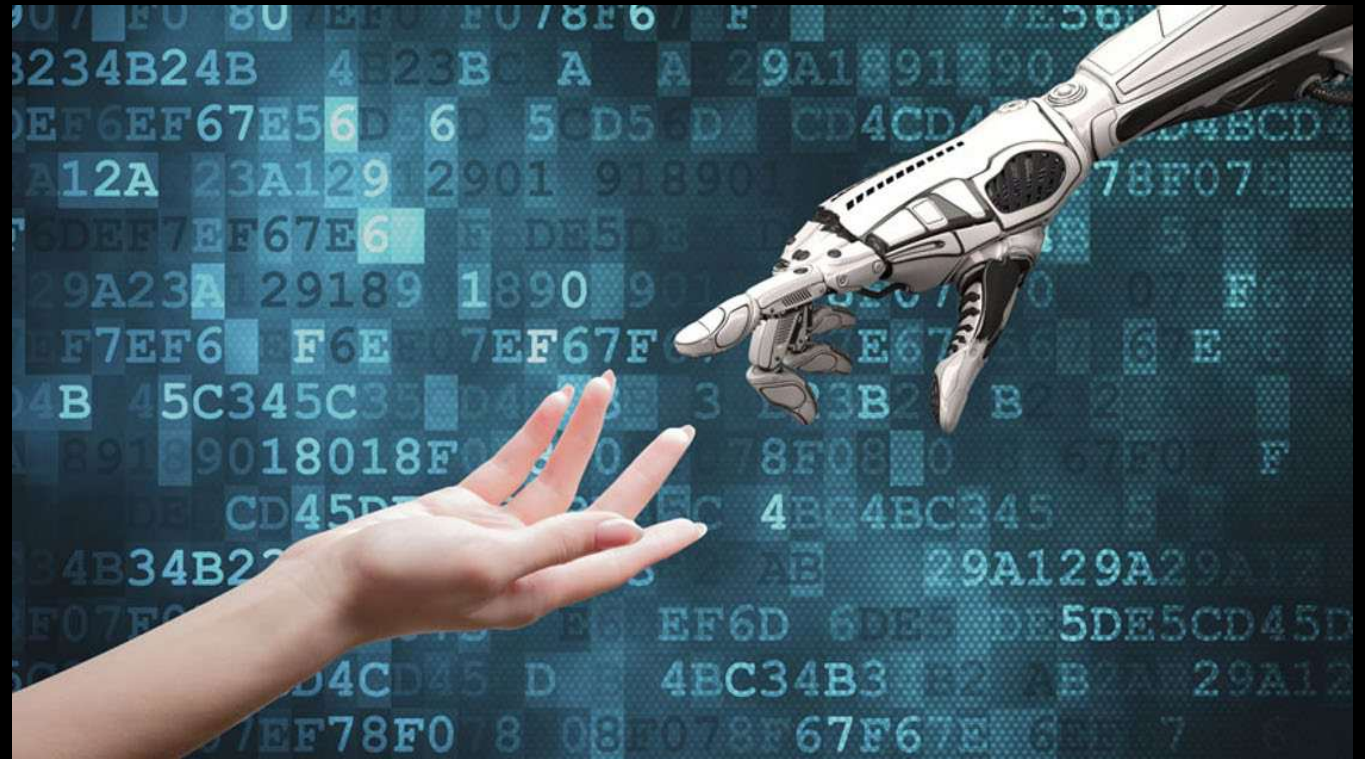
STRONG HANDOFFS BUILD STRONG PROJECTS. STRONG PROJECTS BUILD STRONG RELATIONSHIPS.



SE and AI Risk Management

Risk: a situation involving exposure to danger or loss.

- Risk Assessment: the forecasting and evaluation of financial (or other) risks together with the identification of procedures to avoid or minimize their impact.
- Risk Mitigation: the ethical responses of a quality culture that prepares itself to act reasonably.



SE and AI Risk Management

- Integrity of Process
- Prompt Engineering
- Human Determinant
- Vocational Certainty



Three Principles of Law (and Process Ethics) to Apply in SE and AI Risk Management



- **Discovery:**
the moment we
discover a fact
or event and
become morally
and/or legally
responsible.

Three Principles of Law (and Process Ethics) to Apply in SE and AI Risk Management



➤ **Discovery**

➤ **Due Diligence:**
giving every
fact, event,
or problem
the diligence
it is due.



Three Principles of Law (and Process Ethics) to Apply in SE and AI Risk Management



➤ **Discovery**

➤ **Due Diligence**

➤ **Reasonable:**
what any
reasonable
person would
say or do.



A Quality Culture Delivers

- What the customer wants, needs and/or expects.
- Reasonable expectations of feeling safe and secure.
- A perception of trust and reliability in the promises.



The Pairing of
Competent, Well-
Prepared Humans
with the Process
Ethics and
Technologies to
Improve Outcomes
**Makes Great
Things
Possible!**



A full-page background image showing a view of Earth from space. The sun is rising or setting over the horizon, creating a bright glow and lens flare. The Earth's surface shows continents and oceans, with a thin blue atmosphere visible at the edge.

**Thank you for
joining us
today!**