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15 April 2026 Webinar # 194

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Webinar 194: Designing Reliable Systems Through Culture, Process, and Leadership



Presented by:
Larry Kennedy, PhD
CEO, Quality Management Institute

About the Webinar

- Piloted in 2008
- A virtual offering aimed to provide relevant technical information and topics on systems engineering, on a regular basis and on an easy to access platform
- Held normally on Wednesdays

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Email us at webinars@incose.net!

Webinars and SEP PDU* Credits

More information can be found
on [Renewing Certification](https://incose.org)
(incose.org)

*PDU- Professional Development Unit

You can claim 1 PDU credit
towards your INCOSE Systems
Engineering Professional
(SEP) renewal by attending this
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Eligible Sources To Claim PDU

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- Watching a recording of the webinar: "Consume SE-related media, including journal article, book, video, or audio."

INCOSE webinars may also
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matter.

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Webinar 194: Designing Reliable Systems Through Culture, Process, and Leadership



Presented by:
Larry Kennedy, PhD
CEO, Quality Management Institute

This Webinar is being recorded.

The full recording and slide deck will be made available to all INCOSE members and CAB associates within 10-12 business days from the original air date in the INCOSE Library.

Questions? Comments?
Suggestions?

Email us at: webinars@incose.net!

INCOSE Webinar 194: Designing Reliable Systems Through Culture, Process, and Leadership

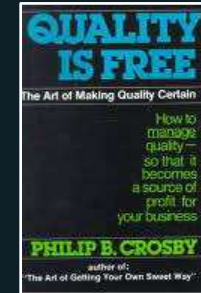


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Quality Culture = Reliable People

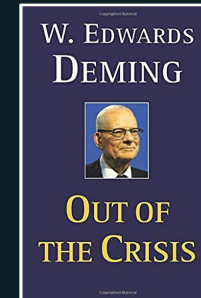
Quality is the result of a carefully crafted cultural environment.
It has to be the fabric of the organization, not part of the fabric.

Philip B. Crosby



Deming, in his “14 Points” emphasized the need to “create constancy of purpose for improving products and services” and that it should be supported by “a vigorous program of education and self-improvement for everyone.

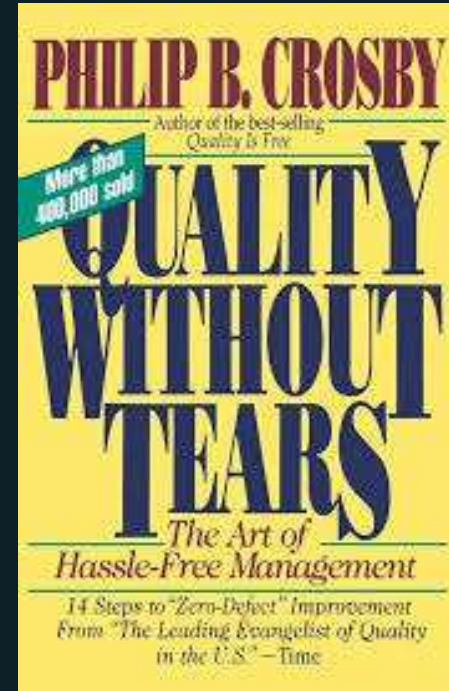
W. Edwards Deming



Quality Culture = Reliable People

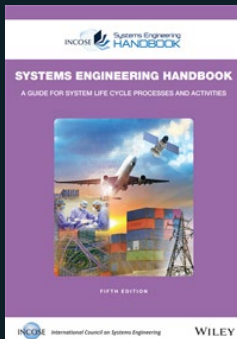
Quality Without Tears came into being as the result of my desire to make it clear that the key to quality improvement was understanding concepts, not implanting some complex system.

Philip B. Crosby



The Eight Attributes of a QMI-INCOSE Quality Culture

“A high-performing work culture is measured by identifiable attributes or values within an organization's leadership style and workforce that directly influence the reliability of outputs. Kennedy leverages Deming's mandate and the work of Crosby by defining the Eight Attributes of a Quality Management Culture.”



International Council on Systems Engineering
Systems Engineering Handbook
(Wiley, Fifth Edition 2023)



The Eight Attributes of a QMI-INCOSE Quality Culture



Knowledge is Power



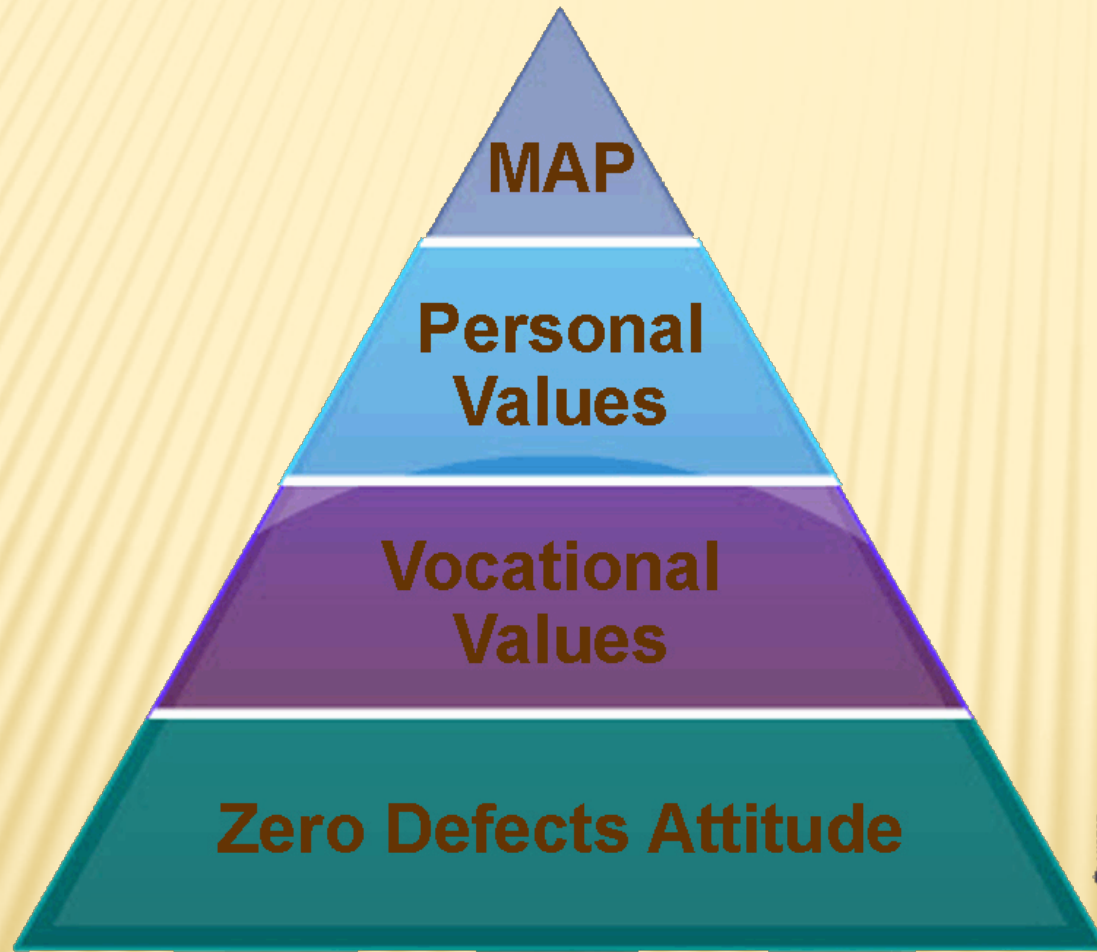
- **With Enough Information Anyone Can Make Good Decisions and Build Reliable Systems**

Knowledge of **QM Skills**

- **Editing**
- **Inspecting**
- **Testing**
- **Monitoring**
- **Auditing**



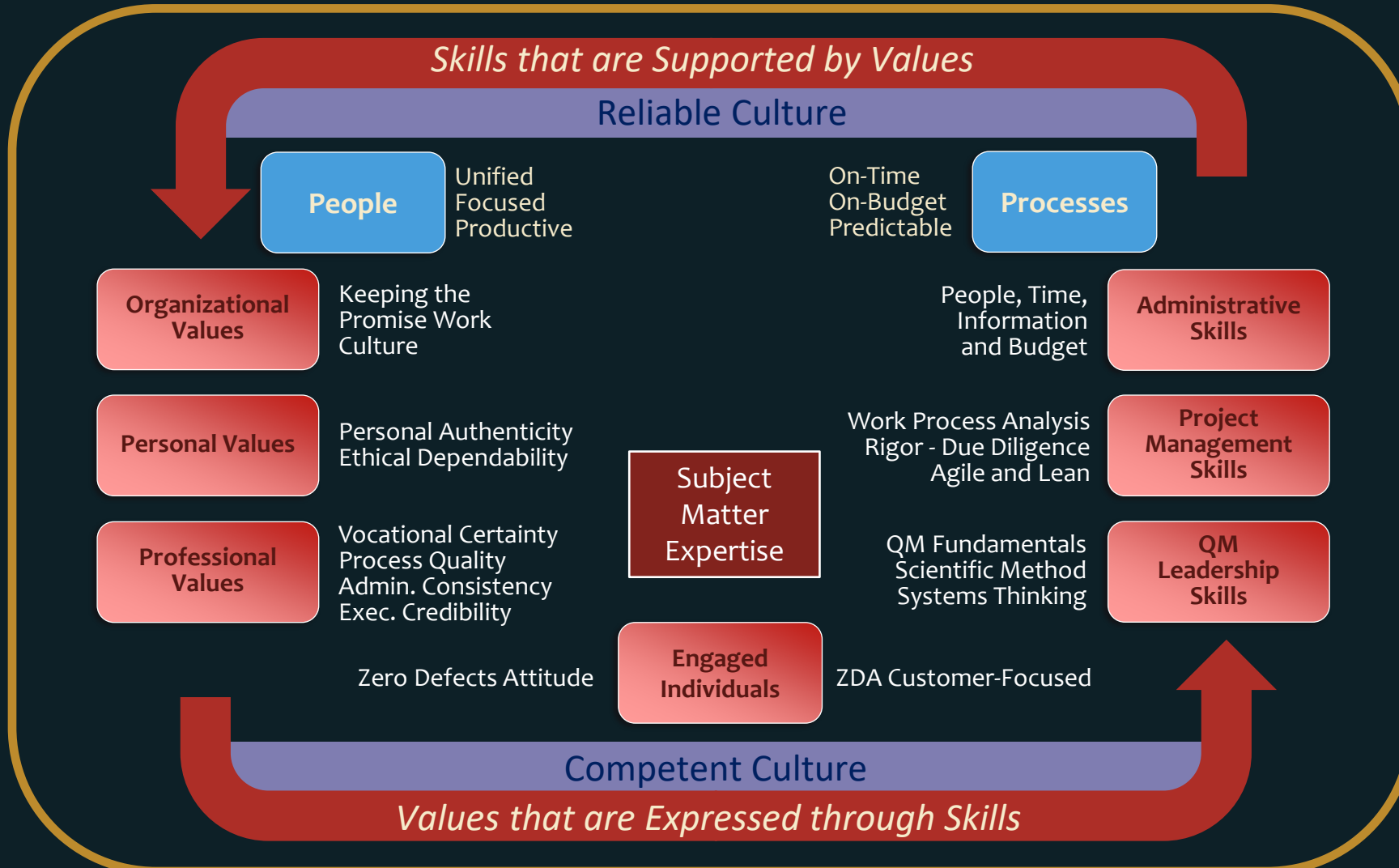
Knowledge of QM Values



QMI-INCOSE QM Culture

People • Tools • Processes

Integrated Values and Skills Development



QUALITY
MANAGER
ATTRIBUTE

1

Zero Defects Attitude



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

What is a Zero Defects Attitude?



Working Harder – Longer?



➤ **More Effort
and Hours**



Intense Feelings of Goodness?



Living Like **Mr. Guessinwhat?**

- **Guessing What to Do Next**
- **Avoiding Accountability**



QUALITY
MANAGER
ATTRIBUTE

1

Zero Defects Attitude



- **Pride of Workmanship**
- **Not Expecting Perfection**
- **Always Keeping the Promise**

QUALITY
MANAGER
ATTRIBUTE

2

Vocational Certainty

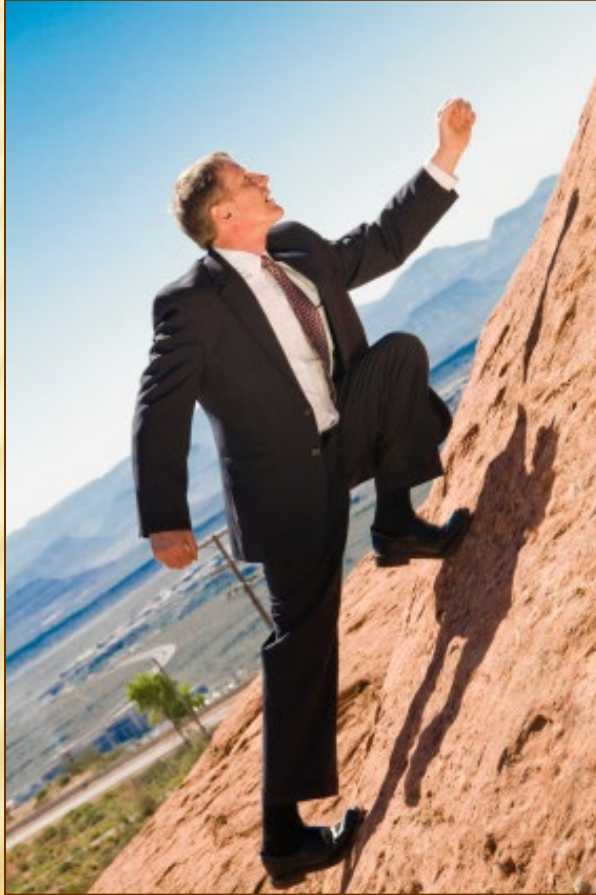


➤ **A Quality Manager Models the Vocational Certainty of a Trained and Experienced Person**

The Eight Attributes of a QMI-INCOSE Quality Culture

1. Zero Defects Attitude	A measure of our commitment to keep our promises and to initiate systems with the reliability goal of preventing even one defect from reaching our customers.
2. Vocational Certainty	A measure of our faithfulness to our career agenda. QM's are disciplined about developing their skills and talents and acquiring earned confidence.
3. Process Quality	A measure of our mastery of planning and budgeting disciplines and how effectively we apply them to create viable work processes.
4. Admin. Consistency	A measure of our attention to details. QM's carefully listen to their customer's to identify and conform to their requirements and assure customer satisfaction.
5. Executive Credibility	A measure of our sincerity and skill with people. Sincerity comes naturally from the heart but skills can be sharpened and improved to gain reliable influence.
6. Personal Authenticity	A measure of our resolve to be consistent with our customers and co-workers. Authentic leaders work diligently to make exceptional service feel normal.
7. Ethical Dependability	A measure of our trustworthiness in practical matters. QM's are the people we turn to when we want things to work right, run on time and be there when needed.
8. Create a KTP culture	A measure of the mutual respect, accountability and professionalism in a work culture. These are the practiced values of effective leaders.

Faithful: Devoted to Duties



- **Work Agenda**
- **Job Description**
- **Career Path**

Vocation: The Work You Do

- **Attracted
Your Interest**
- **Supported by
Natural Skills**



Certainty: How Sure or Certain

- **Based Upon Evidence**
- **Confirmed by Facts and Experience**



Vocational Certainty?

- **Learning and Growing?**
- **Peace and Stability?**



Vocational Certainty?

- **Learning and Growing?**
- **Peace and Stability?**
- **Positive View of Life?**

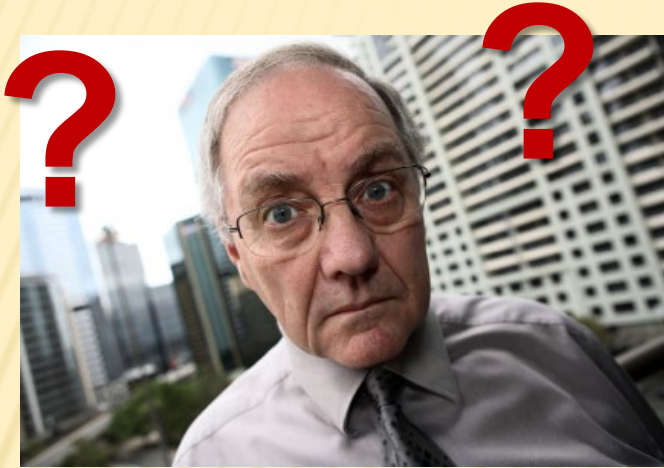


Vocational Certainty

- **Effective and Reasonable Discussions**
- **Systems Thinking with Reliable Results**



Limited Vocational Certainty



- Ineffective
- Insecure
- Guessing
- **Tension and Chaos in the Workplace**



Essential Elements

- **Developing Vocational Certainty**



Essential Elements of V.C.

- **Make Sure
of Your
Calling
and Vision**



Are You Equipped?

- Talents
- Education
- Training
- Experience
- Personality
- Character



Essential Elements of V.C.

- **Commit to Personal Excellence**



Perform With Excellence



➤ **Doing What's Necessary to Prepare**

Potential for Excellence

Prepared for Excellence:

- **Physically**
- **Mentally**
- **Emotionally**



Essential Elements of V.C.

- **Develop the Skills to Manage Processes**



Becoming a **Quality** Manager



➤ **Managerial Skills**



➤ **Personal Strengths**



➤ **Inner Motivations**

What Managerial Skills?

**Do you choose
your role and do
what's required
to fulfill it?**

**Do others direct
your path?**



What Managerial Skills?

**Are you known
as the trainer of
an effective team
or just effective?**

**What do you
leave behind?**



What Managerial Skills?

**Have you been
specially trained
to manage people
and processes?**

**Have you just
been very lucky?**



What Personal Strengths?

Do you have the experience to know what you don't know?

Do you have Big Fish Syndrome?



What Personal Strengths?

**Do you have the
impulse control
and discipline to
handle the stress
of leadership?**

Do you waffle?



What Personal Strengths?

**Are you able to
discuss your
weaknesses w/o
feeling insecure?**

**Are you open
and teachable?**



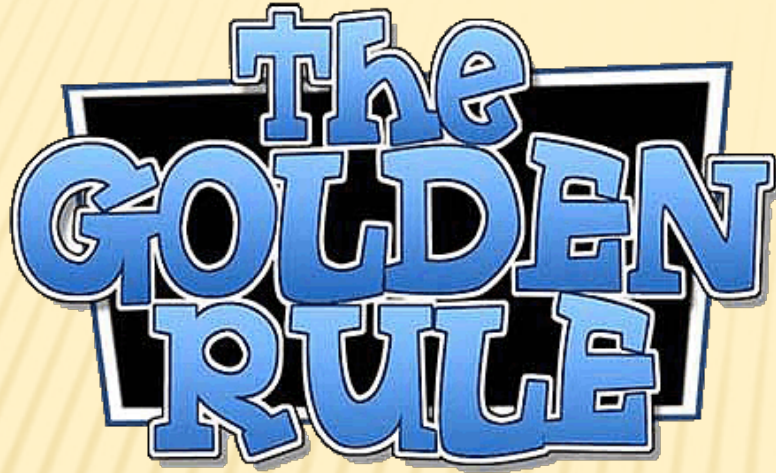
What Inner Motivations?

Do you have an unusual desire to improve things around you?

Do you feel you have a destiny?



What Inner Motivations?



**Do you treat others
the way you would
want to be treated?**



Essential Elements of V.C.

- **Press
Toward
Continuous
Personal
Improvement**



Vocational Certainty

➤ Learning and Growing?



Vocational Certainty

➤ **Becoming Obsolete?**



Essential Elements of V.C.

- **Measure Your Performance Accurately**



Measure of Quality

- **Price of Non-Conformance**
- **What It Costs
In Dollars and
Human Values
When We Don't
Prepare and Miss
Opportunities**



Sidetracked Into Inaction



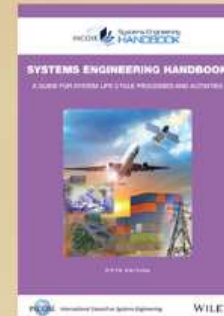
Why Lose When You Can Win!

Systems Engineering Quality Management (SEQM) Working Group

Promoting quality management as a core competency in systems engineering to enhance professionalism, leadership, and organizational effectiveness.



INCOSE IS 2026
June 14, 9:00 AM -
4:00 PM
Master Class



Systems Engineering Quality Manager QMI-INCOSE (SEQM) Certification

"A high-performing work culture is measured by identifiable attributes or values within an organization's leadership style and workforce that directly influence the reliability of outputs. Kennedy leverages Deming's mandate and the work of Crosby by defining the Eight Attributes of a Quality Management Culture."

SE Handbook, Fifth Edition
Sections 2.3.3.5 and 2.3.4.8

[Buy Now](#)

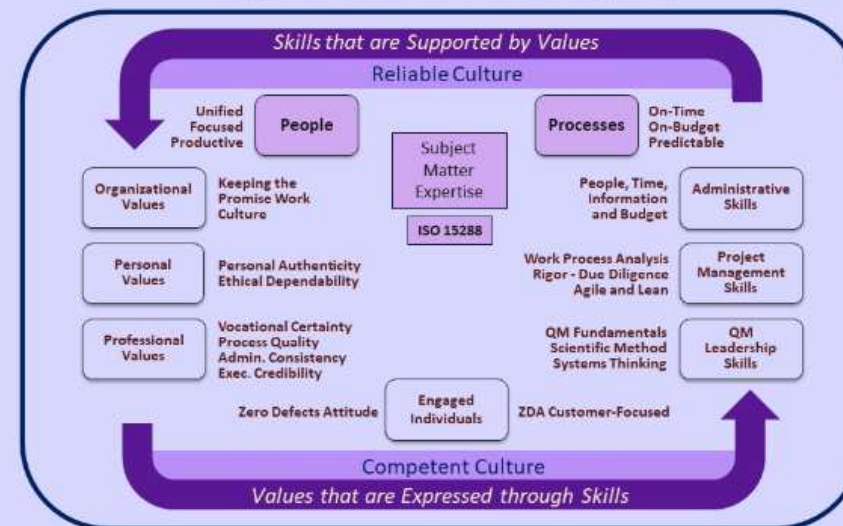
AuthorizeNet Simple Checkout

- The SEQM Certification is a comprehensive solution that will verify and validate your human values, collaborative skills and process knowledge.
- Part 1 reviews the Values and Skills of a High-Performing QM Work Culture. Part 2 is focused on Risk-Based QM, Systems Thinking, and Work Process Analysis.
- This is a self-paced, competency-based online curriculum with verifiable measures, transcript, and 24/7 access to videos, literature, tutorials and exams.

[Click Here for SEQM Certification Curriculum Details](#)

QMI-INCOSE SEQM Culture

Complete Quality Management
Integrated Values and Skills Development



Question & Answers

Quick Reminders

- All the previous webinars are now located in the INCOSE Library.
- Attending a Webinar does count as a 1PDU credit towards your SEP renewal.

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