

Never Miss an Opportunity!

ISO 56000 enables an
Innovative Organisation

*by linking with ISO 9001:2015
Quality Management*

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Understanding Innovation.

- Number of definitions
 - Like Quality,
- Essential elements:
 - driven by an unmet need
 - create something new.
 - 'the new' creates benefit.
 - radical change in how we 'do a job'



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What is ISO 56000

- Innovation Management System
- 50+ countries globally in ISO 56000
- ISO Common High Level Structure
 - All ISO Management Systems
 - QMS, EMS, IT security etc.
 - Standard core text and structure
- Alignment with ISO 9001 (blue text)



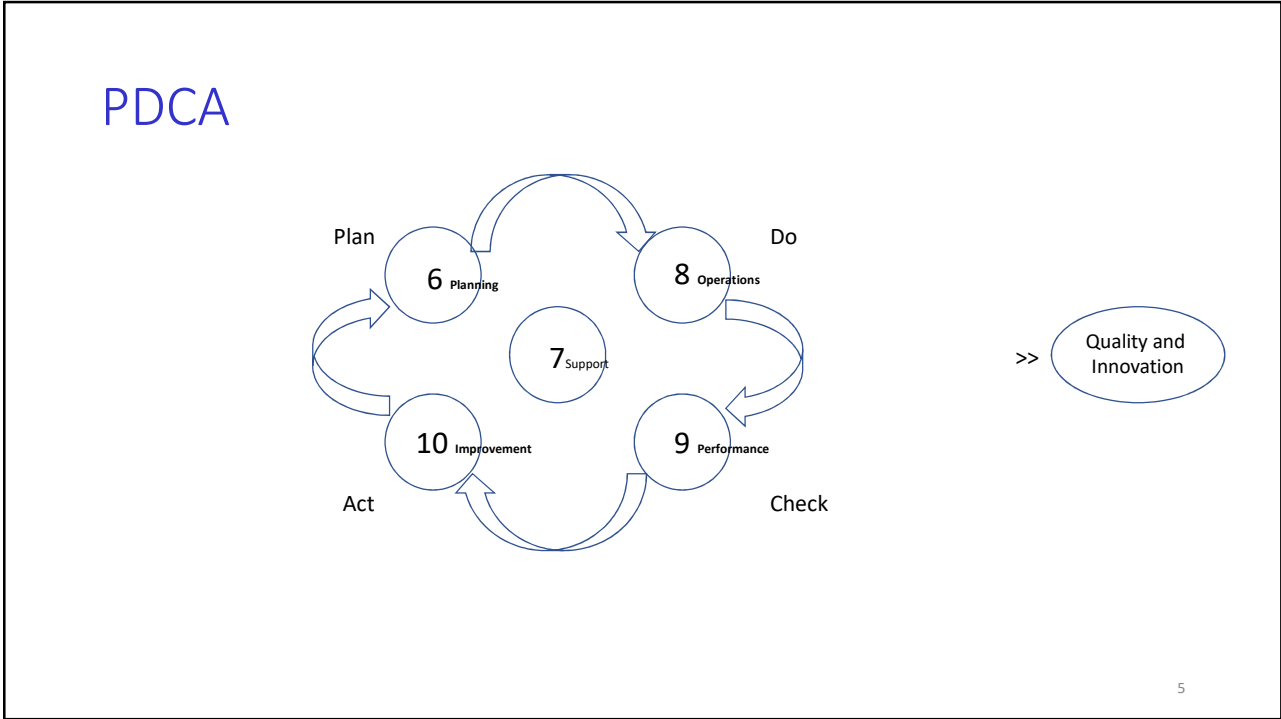
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The WG's and Standards

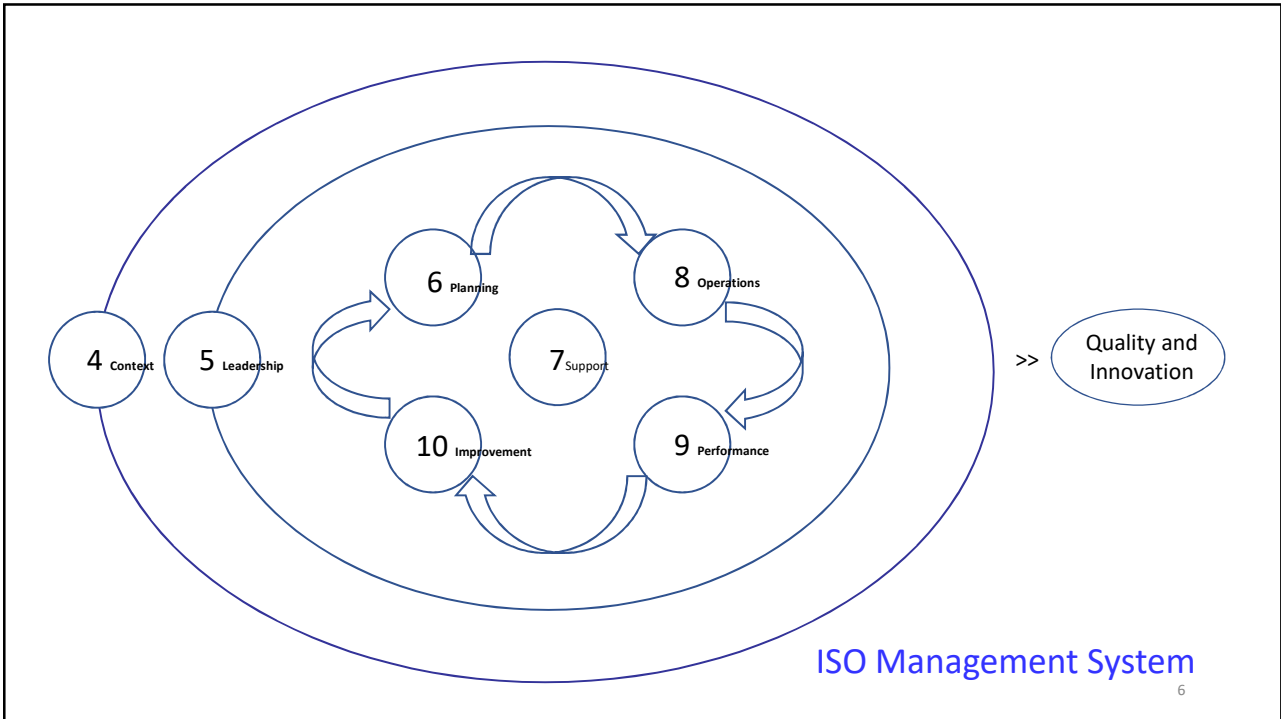
- WG1 Innovation Management System
Guidance; ISO 56002 – Primary Focus
- WG 2 Fundamentals and Vocabulary ; ISO 56000
- WG 3 Tools and Methods
 - ISO 56003 Partnership
 - ISO 56005 Intellectual Property
 - ISO 56006 Strategic Intelligence
 - ISO 56007 Idea Management
- WG 4 Assessment TR 56004



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4 Understanding the context

4.1 The organization and its context

- 4.1.2 External and 4.1.3 Internal issues

4.2 Needs/Expectations interested parties

- Not just customers

4.3 The scope of the management system

- Links to other Management Systems

4.4 Establishing the Management system

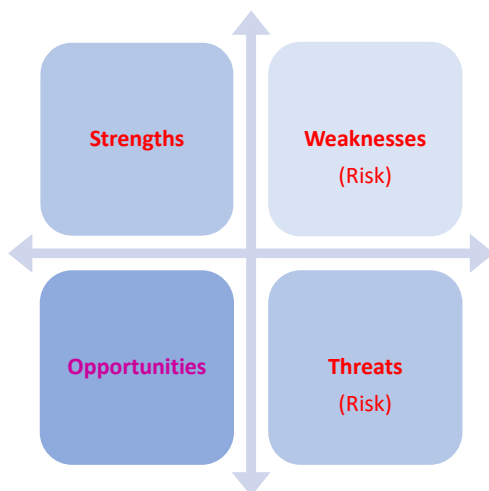
- Culture and Collaboration



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Context Issues (4.1) through SWOT Analysis



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4.4.2 Culture

- Coexistence of creativity and execution
- Challenge assumptions
- Creativity and Change
- Risk-taking & Experimentation
- Learning from failure

4.4.3 Collaboration

- Internal and external
- Knowledge, competences, infrastructure
- Partnerships, open innovation
- Issues of IP ownership



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Integrating Clause 4 with ISO 9001

- SWOT Analysis identifies issues
- ISO 9001 focus: Threats and Weaknesses
 - which create risk
- ISO 56002 focusses on Opportunities
 - which also have risk
- Culture and Collaboration are system critical
- Clause 6 will address Opportunity and Risk



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5 Leadership for innovation

5.1 Leadership and commitment

5.1.1 General

5.1.2 Focus on **new value**

5.1.3 **Vision (future state)**

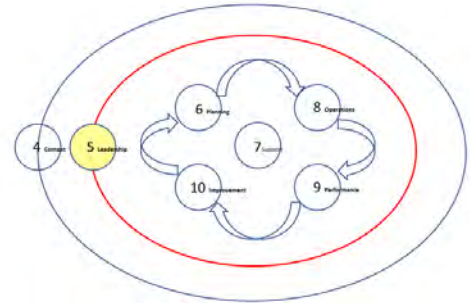
5.1.4 **Strategy (flexibility)**

5.2 Innovation policy

5.2.1 Establishing the innovation policy

5.2.2 Communicating the policy

5.3 Organizational roles, **responsibilities**



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5.1.4 Innovation strategy

- **Consistent** with **vision and policy**.
- **Define opportunities** and types of innovations
 - e.g. products, services, incremental vs. radical
- **Compatible** with **strategic direction**
- **Engage** and inspire **people**
- Sets **objectives and milestones**;
- **Must be flexible**



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Integrating Clause 5 with ISO 9001

- Vision and Strategy need to be addressed as well as policy
- Strategy must be 'agile'
- Policy will integrate easily with 9001
- Responsibilities for innovation require clear definition.
 - They are often new roles and not understood

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6 Planning

6.1 Actions to address opportunities and risks

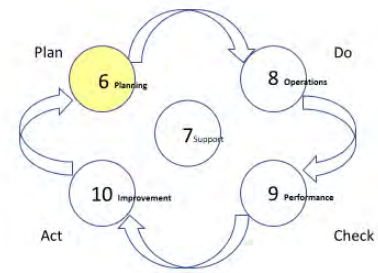
6.2 Innovation objectives and planning

6.2.1 Innovation objectives

6.2.2 Planning to achieve objectives

6.3 Innovation Structure

6.4 Portfolio Management



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6.2.2 Objectives Matrix Example

Objective	What is to be done	Resources needed (Time, People, \$)	Who is responsible	When it will be done	how results will be evaluated (Metrics)
Identify Actions Required	Gap Analysis	2 Days Consultant Staff Agenda	Quality Manager	September	Actions specified for each clause
Engage Leadership	Leadership Workshop	1 Day Trainer Leader Availability	HR Manager	October	Course Evaluation and Exam
Set Targets and Objectives	Strategic Plan	Leadership Team (Evaluate time after workshop)	CEO	November	To be established during Plan

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6.3 Innovation Structure

Organization **Structure** may change
Needs closer attention

Spin Off as a separate business?
Self Managed Teams within the business?
Consider Sub-contracting or partnering?



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6.4 Portfolio Management

- **Align** portfolio **with** innovation **strategy**
- Includes
 - Balance of **risk versus return**
 - Investments of people, funding, etc;
 - **Criteria to terminate** an initiative.
- Communicates **progress** to **Leadership**
- Evaluates performance
- **Leaders adjust strategy**



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Integrating Clause 6 with ISO 9001

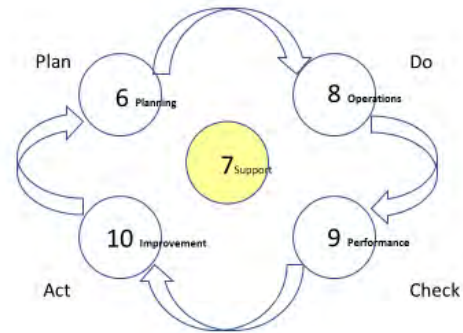
- Opportunity Assessment should be numeric
- Innovation will have high risk
- Manage Innovation Risk don't avoid it
- Set Measurable objectives for innovation
- Organization Structure may change
- Portfolio Management deploys the plan



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7 Support

- 7.1 Resources
- 7.2 Competence
- 7.3 Awareness;
- 7.4 Communication
- 7.5 Documented Information
- 7.6 **Tools** and methods
- 7.7 **Strategic intelligence**
- 7.8 **IP** management



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7.1 Resources

- 7.1.2 People
 - Far more attention
- 7.1.3 Time and 7.1.5 Finance
 - can integrate with [Resources 7.1 in ISO 9001](#)
- 7.1.4 Knowledge
 - combine with [Knowledge 7.1.6 in ISO 9001](#)
- 7.1.6 Infrastructure
 - significant in ISO 56002
 - Needs far more attention than in ISO 9001



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Integrating Clause 7 with ISO 9001

- 7.2 Innovation Competence
should be identified **in detail**
e.g. Research, Creativity, Project Mgt.
- 7.3 Awareness; explain innovation
- 7.4 Communication; innovation progress
- 7.5 Documented Information

- Major additions can **stand alone**
- 7.6 **Tools** and methods
 - 7.7 **Strategic intelligence** management
 - 7.8 Intellectual property (**IP**) management



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Competence: Creator, Connector, Developer, Doer?

1	I 'Connect the Dots'	I get things done	I like Possibilities	I bring things 'down to earth'
2	I need to understand	I make things work	Everything has a good and bad side	There has to be a right answer
3	Don't tell me what to do	Give me facts not theory	I create choices	I like to analyze data
4	A Concept must be sound	I like 'energy'	Don't fuss with details	I like precision
5	I think things through	I take risks	I like to hear about problems	I focus
6	I like the big picture	I find a way that works	I want to own the problem	I am thorough
7	I like to define the problem	I push for acceptance	I find out the facts	I Plan
	TOTAL	TOTAL	TOTAL	TOTAL

e-version at www.petermerrill.com/self-assessment
Column 1 you're a **Connector**, **Column 2** a **Doer**,
Column 3 a **Creator** and **Column 4** a **Developer**

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8 Operation

8.1 Operational planning and control

8.2 Managing innovation initiatives

8.3 Innovation processes

8.3.1 General

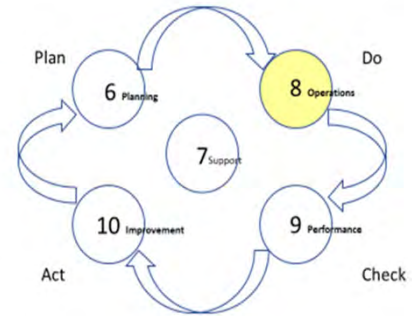
8.3.2 Identify **opportunities**

8.3.3 Create **concepts**

8.3.4 **Validate**

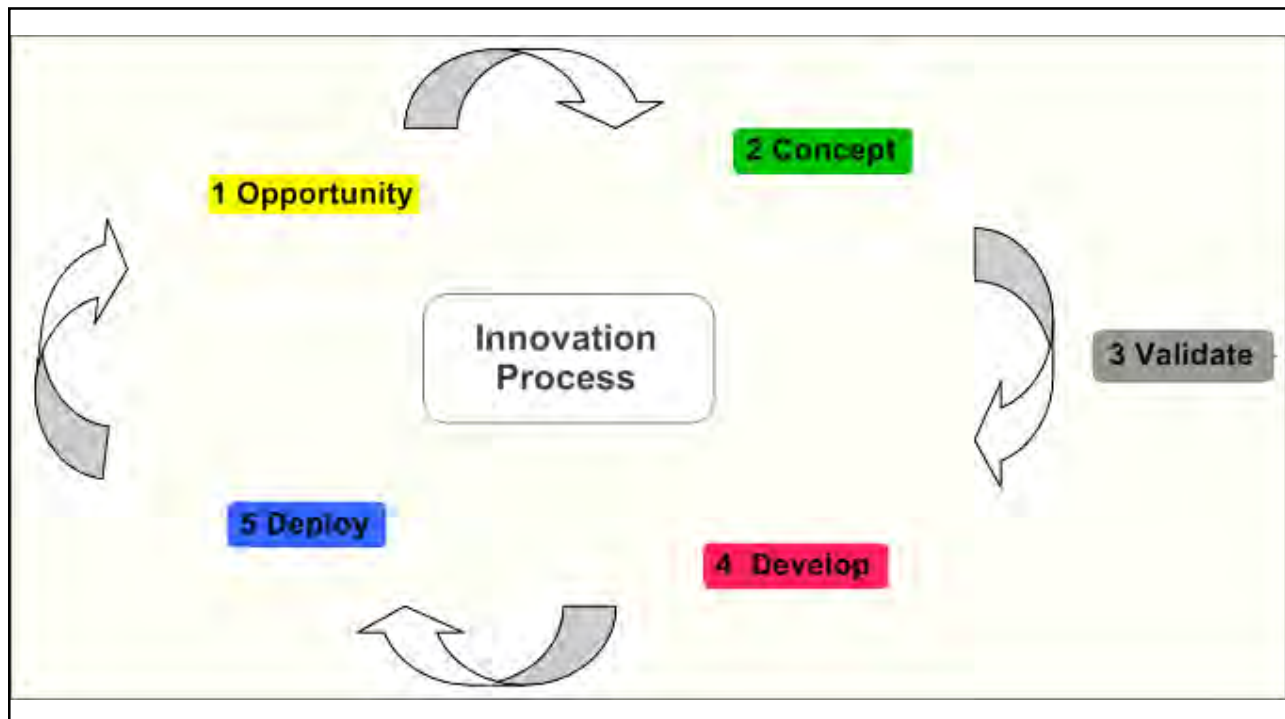
8.3.5 Working **Solutions**

8.3.6 **Deploy** solutions



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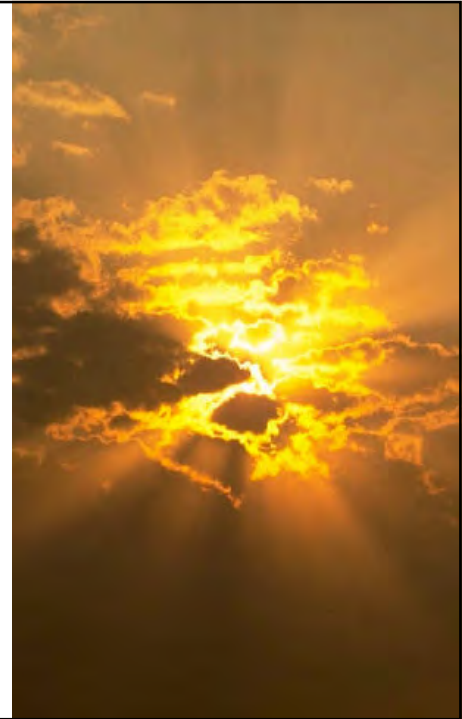
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8.3.2 Identify opportunities

- **Ethnographic studies**, focus groups,
 - user scenarios, competitor research
- **Find Stated and Unstated Needs**
- **Prioritize potential opportunities**
 - Create problem statement.

8.3.3 Create potential solutions

- new ideas using **creative problem solving**,
 - or other methods;
- Collect data
- Select the best solutions
 - **capability, breakthrough, risk,**



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8.3.4/5 Validate/Develop solution

- Validate **viability** and internal resources
- Reduce Uncertainties
- Develop Working Solution
- Improve based on learnings from test users

8.3.6 Deploy solutions

Deliver and **support the solution**,
 Value Proposition – benefits not features
 Evaluate **adoption rates** / **value impact**
Improve solution, Address Scalability



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Integrating with Clause 8 ISO 9001

Initially separate clause for 8.3 Process

Can integrate with 8.3 Design

8.1 Operational planning and control

8.2 Managing innovation initiatives

8.3 Innovation processes



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9 Performance evaluation

9.1 Monitoring, measurement, analysis,

9.1.1 General

9.1.2 Analysis and evaluation

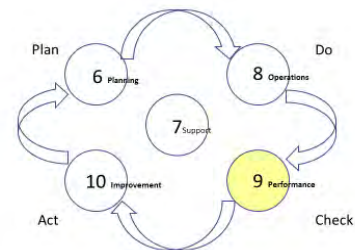
9.2 Internal audit

9.3 Management review

9.6.1 General

9.6.2 Review inputs

9.6.3 Review outputs

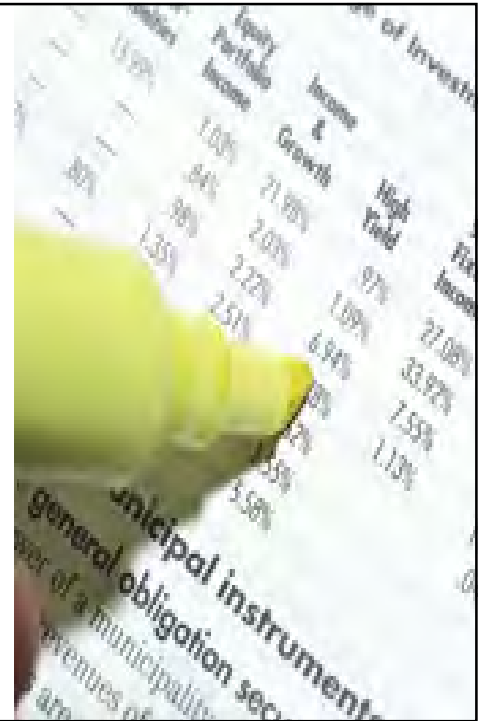


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9.1 Performance indicators

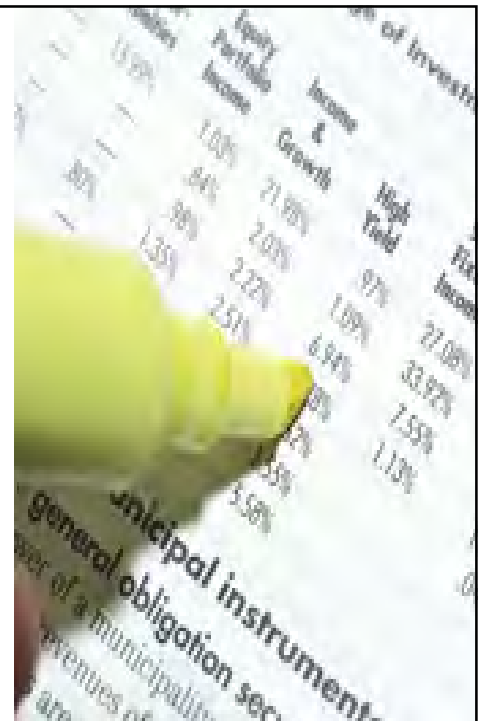
- **input**-related indicators,
 - **number of ideas**, sources of knowledge,
- **throughput** indicators
 - speed of development, **time to market**
- **output**-related indicators
 - ideas implemented, new customers,
 - **ease of use, speed of adoption**, satisfaction
- **new revenues**, cost savings,
 - IP value, RoI,



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Integrating Clause 9 with ISO 9001

- Easier clause to integrate
- 9.1 Build Innovation Metrics
 - into the [ISO 9001 Chart](#)
- 9.2 [Internal Audit](#)'
 - initially conduct a Gap Analysis
- 9.3 Integrate innovation
 - into the existing [Management Review](#)



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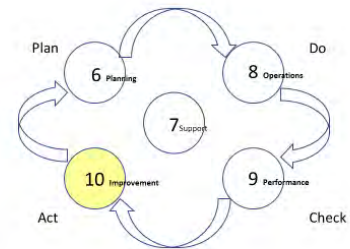
10 Improvement

- 10.1 General

- 10.2 Deviation, nonconformity, C/A

- deviation - difference from expected performance
 - nonconformity - non-fulfillment of a requirement.

- 10.3 Continual improvement

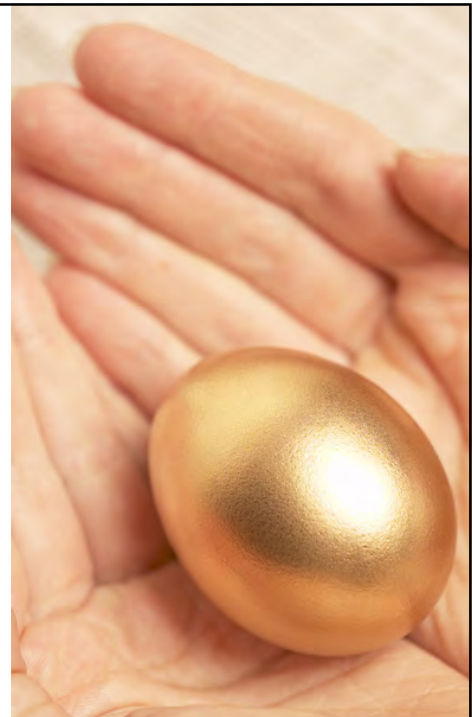


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Integrating Clause 10 with ISO 9001

- Innovation outcomes are not predictable
- Deviation - difference from expectation
- Deviations are learning opportunities
- **Non Conformance and Corrective Action**
 - address process failure
- New Knowledge drives System improvement.



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An Integrated Quality and Innovation Management System

- Common ISO Structure
- Global consensus
- ISO 56002; Complete capture of innovation
- The future requires Quality & Innovation
- Your Job will change – you must change
- Big Opportunities!



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Innovation Implementation Plan												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Leadership and Strategy												
Gap Analysis												
Leadership Workshop												
Business Context												
Opportunity and Risk												
Strategy Development												
Measurable Objectives												
Culture and Process												
Innovation System Description												
Employee Awareness												
Culture & Competence												
Opportunity Assessment												
Ideation for Solutions												
Working Solution												
Solution Delivery												
Assess and Improve												
Internal Audit Training												
Internal Auditing												
Refine Objectives												
System Adjustments												
Management Review												
Refine Solution												

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Innovation System Implementation

- Gap Analysis
 - to identify actions needed
- For a copy of the article from Quality Progress which details this talk
 - note; ISO 56002 was numbered as ISO 50501 during development

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Seeking Innovation through tools, techniques and approaches

Innovation Imperative

STANDARDS

Where to After ISO 9001:2015?

Moving beyond quality management to Innovation management

by Peter Merrill

September 2018 is coming fast, and those who have not transitioned yet to ISO 9001:2015 are probably in a last-minute panic. Unfortunately, a number of auditors have given the false impression that the new ISO 9001 standard does not

require any new work and transition is quite straightforward.

That is far from true.

To get real value from the new standard, you must link it to your business strategy, as well as the external and internal issues that create the context of the organization. The attendant risks are prioritized, and a plan containing measurable objectives is developed to mitigate those risks.

FIGURE 1

ISO 50501 Innovation Management System

