



# Back to School

## Quality 101

ASQRS Quality Conference October 2017

# Quality Standards: Staying Current is Key to Business Excellence

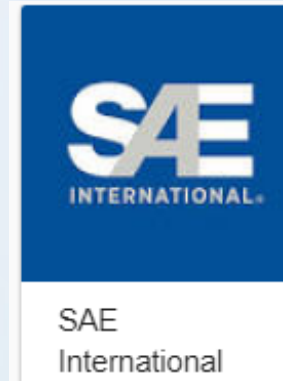
Lori Cohen  
Compass Quality Solutions



# Objectives

- Understand the value of standards
- Learn the process for staying current with standards
- Understand ISO Management System Standard changes

# Standards



# Standards

## Specific purposes

- Practices
- Methods
- Guidelines
- Requirements

## Basic purpose

Ensure consistency

# Management System Standards

## Management system standards

### What is a management system?

A management system is the way in which an organization manages the inter-related parts of its business in order to achieve its objectives. These objectives can relate to a number of different topics, including product or service quality, operational efficiency, environmental performance, health and safety in the workplace and many more.

<https://www.iso.org/management-system-standards.html>

# Management system standards

We have a number of management system standards, each focusing on different issues affecting global business. More information can be found by clicking on the following links.



## **ISO 50001 Energy management**

Put in place an energy management system that delivers continual improvement of energy performance.



## **ISO 9001 Quality management**

Make sure your products and services meet customers' needs with this family of standards.



## **ISO 14001 Environmental management**

Improve your environmental performance with this family of standards.

<https://www.iso.org/management-system-standards.html>



## **ISO 45001 Occupational health and safety**

Reduce workplace risks and create safer working environments.



## **ISO/IEC 27001 Information security management**

Ensure your organization's information is secure with this family of standards.



## **ISO 22000 Food safety management**

Inspire confidence in your food products with this family of standards.

Being developed,  
replaces [OHSAS 18001](#)

Major revision expected to be published in 2018. The Draft International Standard (DIS) now available.

<https://www.iso.org/management-system-standards.html#PopularMSS>



# Value of standards

- Profits
- Customer
- Management
- Growth

*“Benefits of management system standards extend far beyond the achievement of bottom line performance and customer satisfaction”*

Mike Toffel, Harvard Business School Professor

# Profit



Reduction in costs that directly impact the bottom line

Increased profits due to clearly defined processes and improved process controls

- Quality - reduced defects and cycle times
- Environmental – less waste
- Safety – fewer incidents/accidents

*Bottom line.. returns financial value*

# Profit



# Quality

## Reduced defect-related costs

- Labor cost
  - Rework
  - O/T
- Material cost
  - Scrap
- Customer claims
  - Replacement
  - Transportation
  - Accounts Receivable (A/R) lock up

# Profit



Harvard Business  
School Study,  
2010

The value of the  
ISO standards

ISO standard adopters vs non-adopter competitors

- higher sales
- higher rates of corporate survival
- provide higher wage increases-  
assumes company's sales and  
quality increases

Final conclusion was that organizations certifying to quality management systems resulted in numerous benefits to the organization and its employees

# Profit



Wharton Risk  
Management  
and Decision  
Processes Center  
study

## Benefits of ISO 14001 certification

- 96.7% respondents indicated reduction in waste
- 93.3% indicated increase in use of recycled materials
- 90.0% indicated reduction in environmental incidents
- 84.6% respondents indicated reduction in permit violations

# Profit



Wharton Risk  
Management  
and Decision  
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study

## Benefits of ISO 14001 certification

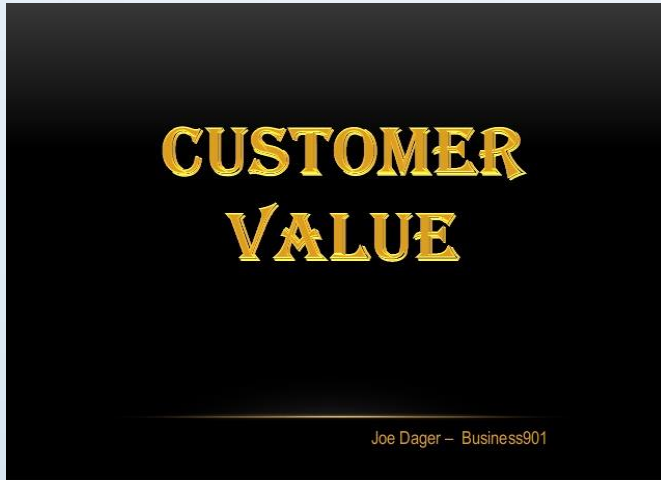
- 91.9% indicated reduction of utility consumption
- 98.3% indicated improvement in emergency preparedness
- 96.5% indicated a contribution to improved environmental performance of their product

# Environmental incidents

BP's Deepwater Horizon costs total \$62B - USA Today 7/14/16



# Customer



Provides  
Customers With  
Peace of Mind

Certifications provide the confidence that customers appreciate and often require before doing business

- Increased customer satisfaction
- Opens doors for new business



# Management



Able to focus more on strategic and leadership issues

Less firefighting because of better defined processes and responsibilities

Improved productivity due to reduction in issues

- Quality
- Environmental
- Safety

# Growth



Improvement in current capacity with improved process efficiency and effectiveness

- Allows for growth without additional resources
  - People
  - Equipment
  - Facilities

*“Growth resource neutral”*

# Benefits of staying current

- Business value
- Sends message to
  - employees
  - customers
  - other stakeholders



# Staying current

## Process

1. Set alerts for standard updates
2. Learn/understand changes
3. Determine impact
4. Perform gap analysis
5. Create action plan with timeline
6. Implement changes
7. Validate changes

# ISO Management System Standards



Replaces ISO  
Guide 83

## Annex SL

- Structure
  - New format – high level structure
- Terminology Standard text – identical core text
  - Common terms and core definition

Streamlines standards and eases  
integration of management systems

# Annex XL

Specific requirements of each management standard is found within these sections

Annex SL
1 Scope
2 Normative references
3 Terms and definitions
4. Context of the organization
5. Leadership
6. Planning
7. Support
8. Operation
9. Performance evaluation
10. Improvement

# Annex SL



## Risk Management

Elevates preventive and corrective action concept

- Encompasses risk assessment
  - reasonable analysis of risks
  - successful responses to them.
- Risks addressed in the planning phase

# ISO 9001



- More generic - More flexible for service
- Less prescriptive – 6 procedures not required
- Risk-based thinking – PA not requirement
- Enhanced requirements
- New requirements
  - Context of Organization
  - Planning and Risk
  - Organizational knowledge



# Terminology Major Differences

ISO 9001:2008	ISO 9001:2015
Products	Products and services
Exclusions	Not used → Application
Documentation, Records	Documented information
Work Environment	Environment for operation of processes
Monitoring and Measuring Equipment	Monitoring and Measuring Resources
Purchased Product	Externally provided products and services
Supplier	External provider



# References

Harvard Business School study: Quality Management and Job Quality: How the ISO 9001 Standard for Quality Management Systems Affects Employees and Employers

<http://hbswk.hbs.edu/item/quality-management-and-job-quality-how-the-iso-9001-standard-for-quality-management-systems-affects-employees-and-employers>

Evidence That Sets the Record Straight – How Management System Standards Add Value to Any Organization

<http://www.iaar.org/docs/ValueofManagementSystems.pdf>

Harvard Business School Professor Discusses Importance of ISO Standards

<https://www.qualitydigest.com/inside/quality-insider-article/harvard-business-school-professor-discusses-importance.html>

