



# Application of Quality Management Systems

Southern Regional Center for  
IPM

Raleigh, NC



# [ Covering ]

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- Who is Novecta
- What is a quality management system
- Application
- Benefits



**Illinois  
Corn  
Growers**

**Novecta**



**IOWA  
CORN  
GROWERS  
ASSOCIATION**

Joint Venture by:

- **Illinois Corn Growers Association**
- **Iowa Corn Growers Association**
- **Illinois Corn Marketing Board**
- **Iowa Corn Promotion Board**



**IOWA  
CORN  
PROMOTION  
B O A R D**

# Guidance or Standards Novecta has been a part of:

- USDA Process Verified Program
- ISO 22006
- Quality Plus Management Standard
- BQ-9000
- Biotechnology Quality Management Standard
- Agriculture Soil Offset Standard

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# What is a quality management system?

- The quality management system is that part of the system that focuses on:
  - Achievement of results
  - Basic objectives
  - Needs, expectations and requirements of interested parties.



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# Quality Management System Emphasizes

- Control
- Consistency
- Reproducibility



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# How does a QMS operate?

## **The short answer:**

- Say what you do (documentation)
- Do what you say (implementation)
- Prove what you do (records)
- Review and improve  
(continuous improvement)



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# Major points of a QMS

- Involvement of people
  - Create transparency and communication
- Research / Process management
  - Organizes work
- Training
  - Provides consistent outcome



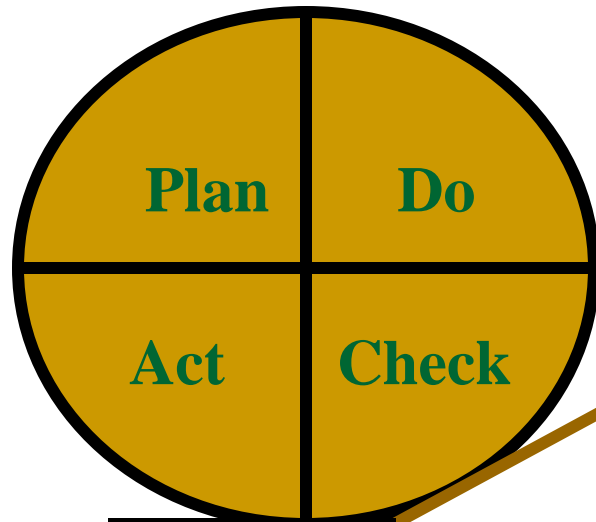
# Major points of a QMS (cont)

- Data management
  - Statistical control
  - Research papers
- Continuous Improvement
  - Corrective actions
  - Root cause analysis
  - Internal audits



# Continuous Improvement

Measure/Monitor results against objectives. Improve Process and Change QMS as needed to achieve and sustain desired results.

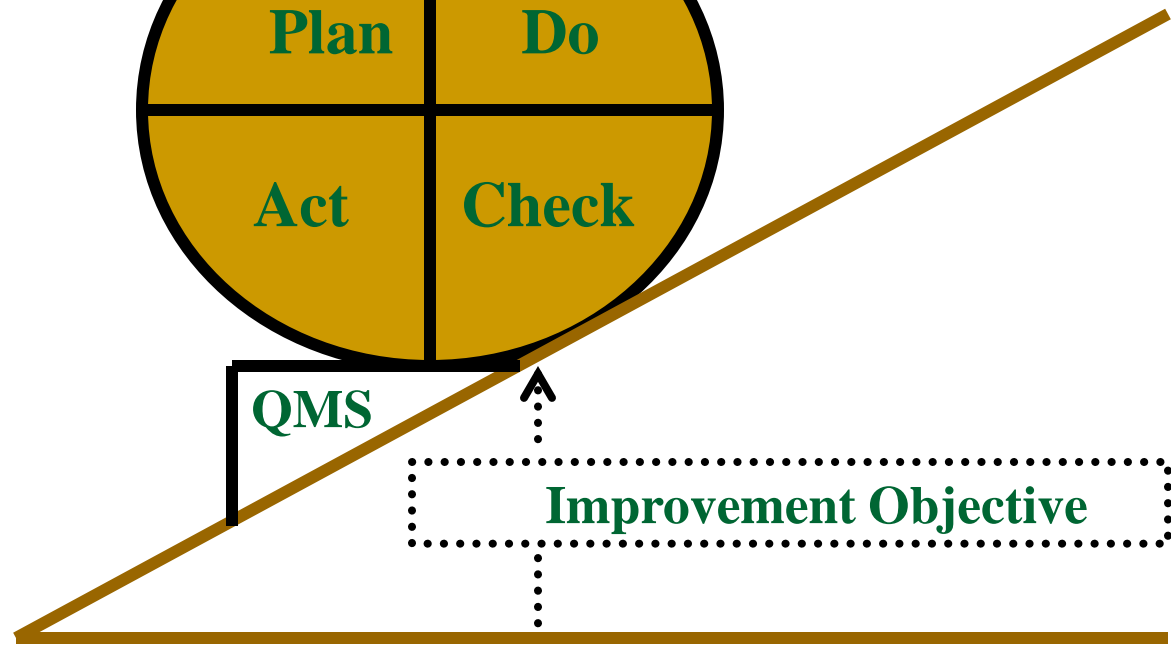


**Results**

**QMS**

**Improvement Objective**

**Baseline Performance**



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# Types of Quality Management Systems

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# QMS systems that may apply

- ISO 9001:2008
- USDA Process Verified Program (PVP)



# International Organization of Standards (ISO)

- Comes from the Greek word isos which means equal
- Based in Geneva Switzerland
- Started shortly after WW II by 25 countries: now has 157
- Several standards and guidelines in use in many different industries
- ISO 9001:2008 - the number 9001 is the quality standard and 2008 is the last year for the update

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# ISO Principles

- Customer Focus
- Leadership
- Involvement of People
- Process Approach
- System Approach to Management
- Continual Improvement
- Factual Approach to Decision Making
- Mutually Beneficial Supplier Relations

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# ISO 9001 Requirements

- 1.0 Scope
- 2.0 Normative References
- 3.0 Terms and Definitions
- 4.0 Quality Management System
- 5.0 Management Responsibility
- 6.0 Resource Management
- 7.0 Product Realization
- 8.0 Measurement, Analysis and Improvement



# USDA PVP

- United States Department of Agriculture Process Verified Program (PVP)
- Same requirements as ISO 9001 but adds requirement #9 -Control of USDA Process Verified term and shield
- PVP adds Verification points for marketing to be able use the USDA shield



# DOCUMENTATION OVERVIEW



# How to get started

- Define what scope is
  - This is puts a “fence” around the QMS
- Define the customer
  - Who will be the user or who will benefit?
- What is the “product”
  - The outcome or result of the QMS
- Flow charting
  - Beginning to end



# Quality Management Value

- **Efficiencies**
  - Consistent procedures
  - Improve data management
  - Better utilization / sharing of technology
  - Saves cost
- **Enhanced Relationships**
  - Across researchers and users
  - International parties
- **Preparation for the future**
  - Can expand program easily to different applications
  - Flexible as conditions change

# QMS Tools

- Templates
  - Easily adaptable
- Software
  - Communication
- Experience to manage
  - Understanding of terms



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What's it all about?

**CONFIDENCE**

Of the Users

**CONFIDENCE**

Of Government Agencies

**CONFIDENCE**

Of Auditors

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# Thank You

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