

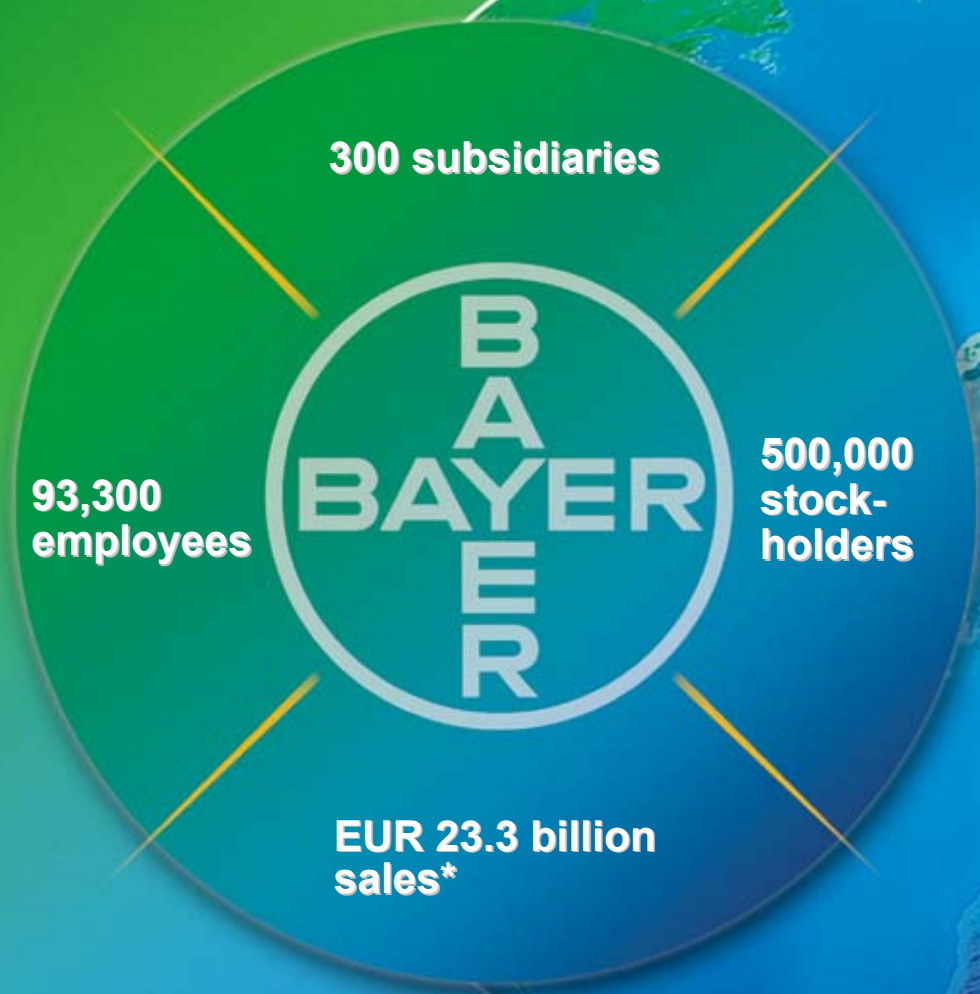


Best Practices in Communicating Business, Product and Compliance Risks to Top Management

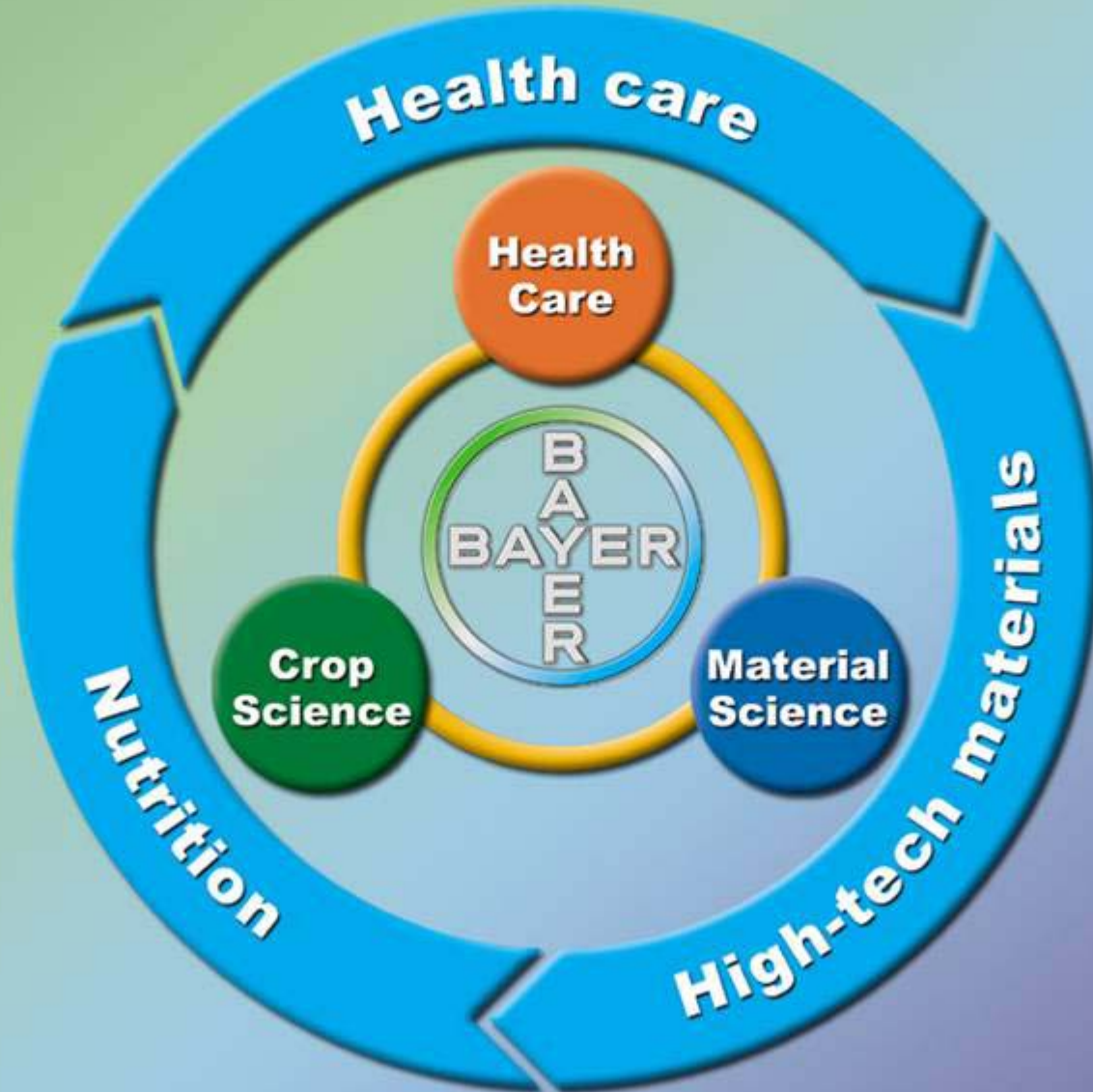
Javad Seyedzadeh
Sr. VP QA/RA/HES

**The Medical Device Regulatory and
Compliance Congress**

Bayer Group



Bayer: Science For A Better Life



Employees
Sales (2004)

35,300
EUR 8,485 million

Animal Health

Livestock
Companion Animals



Biological Products

Hemophilia

Consumer Care

Non-prescription drugs
Vitamins



Pharmaceuticals

Cardiovascular
risk management
(including diabetes)



Diagnostics

Near Patient Testing
Laboratory Testing
Molecular Testing



Diabetes Care

Blood glucose
monitoring systems



Agenda

- **Business Environment**
- **Fundamental Gaps**
- **Best Practices in Communication: Closing the Gaps**
- **Best Practices: Results**
- **Messages to Take Away**

Business Environment

Industry Trend

- QMS Evolution focus from **product to enterprise**
- PHARMA regulation changing to be more **process and system vs. product**
- **Similarity** between Sarbanes – Oxley and ISO 9001
- **Combination** products (drug and device)
- Japan and Canada **regulations have changed** to be risk-based oriented
- **Post-market** Challenges

Interesting Information

DRUGS

- Only 1 in 20,000 products gets FDA approval
- It takes 15 years for the company to launch a product
- Typical cost is \$850,000,000

Medical Devices

- Average product life cycle is 2 to 5 years
- Average R&D investment is 7% to 10% of sales

Interesting Information

Compliance Alliance Survey February 2005

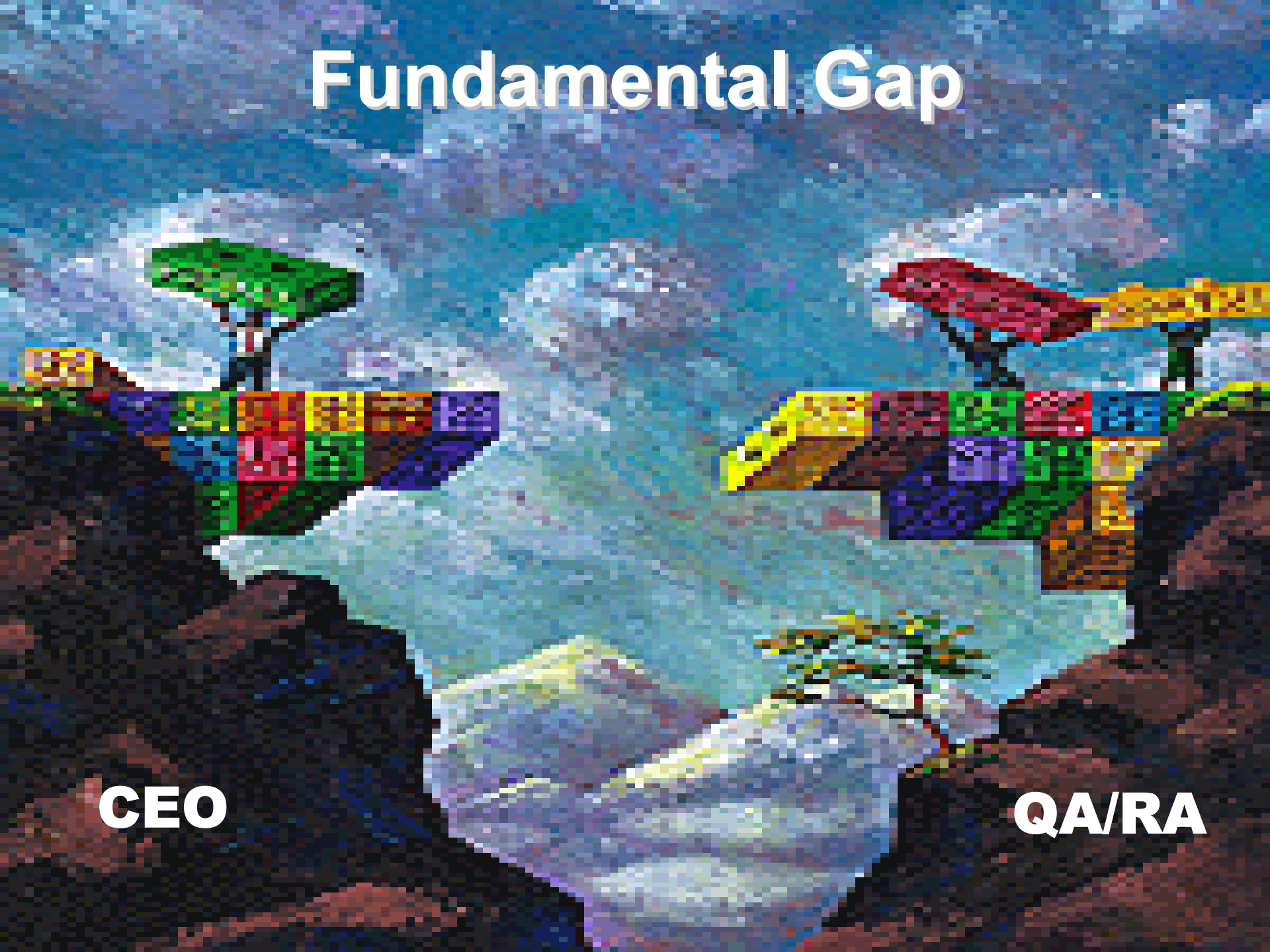
- 1024 Medical Device Companies Responded
 - Top Management
 - 226 thought QA/RA was a necessary *evil*
 - Viewed QA/RA as a *deterrent* to revenue goals
 - QA/RA
 - 383 felt there was *inadequate commitment* from senior executives
 - 377 felt they had *inadequate authority*
 - 333 felt they were *ignored by sales*
 - 337 felt they were *ignored by marketing* department
 - 185 felt that they were *ignored by senior management*

Fundamental Gaps

Fundamental Gap

CEO

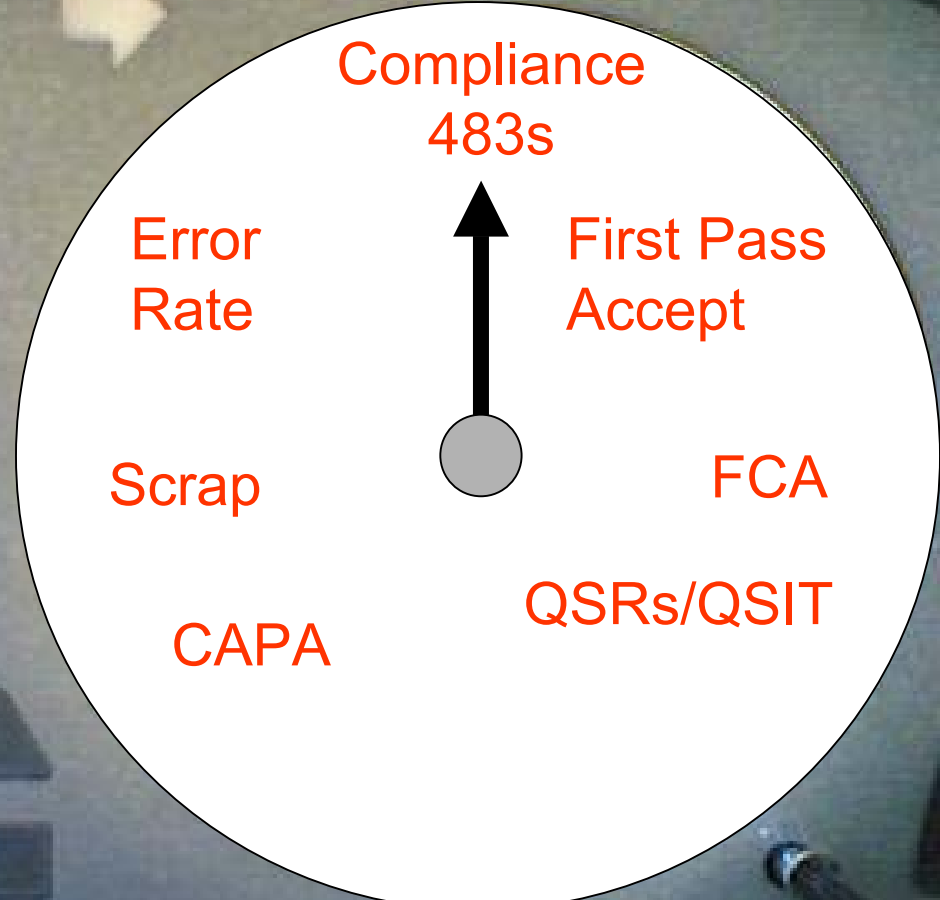
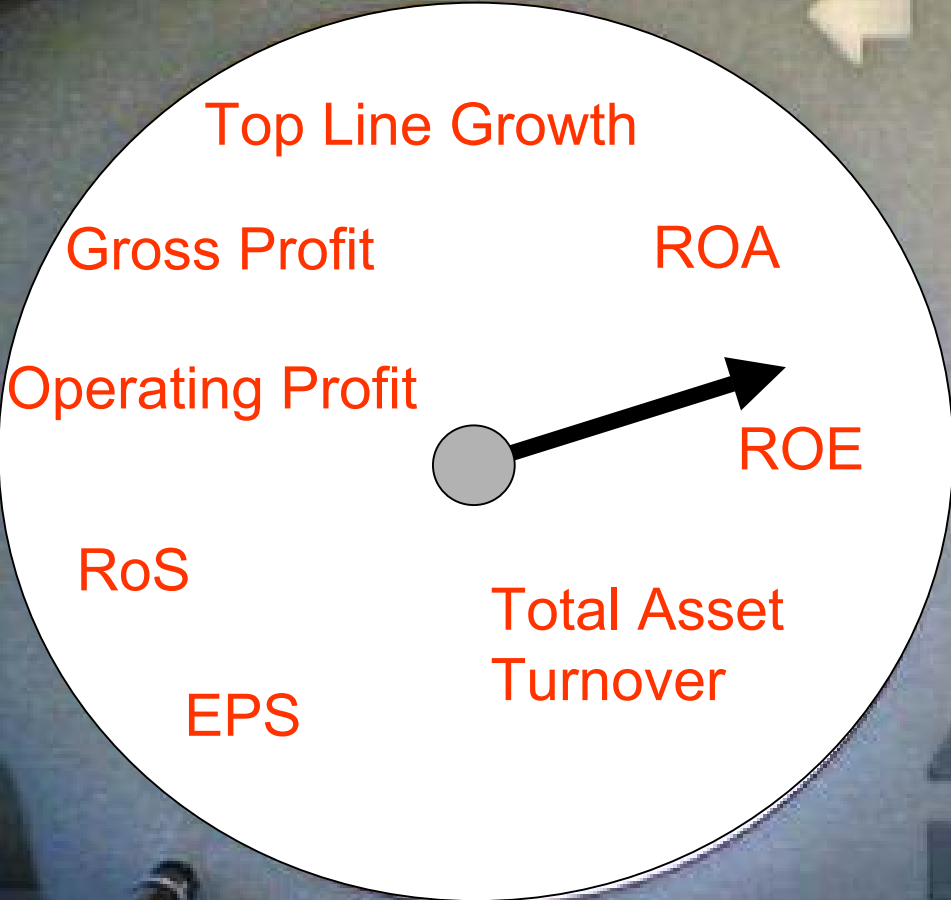
QA/RA



Different Dashboards ?

CEO

QA/RA

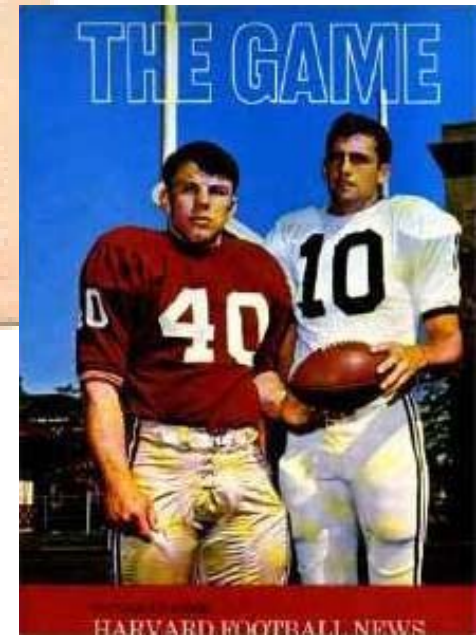


Must Speak the Same Language

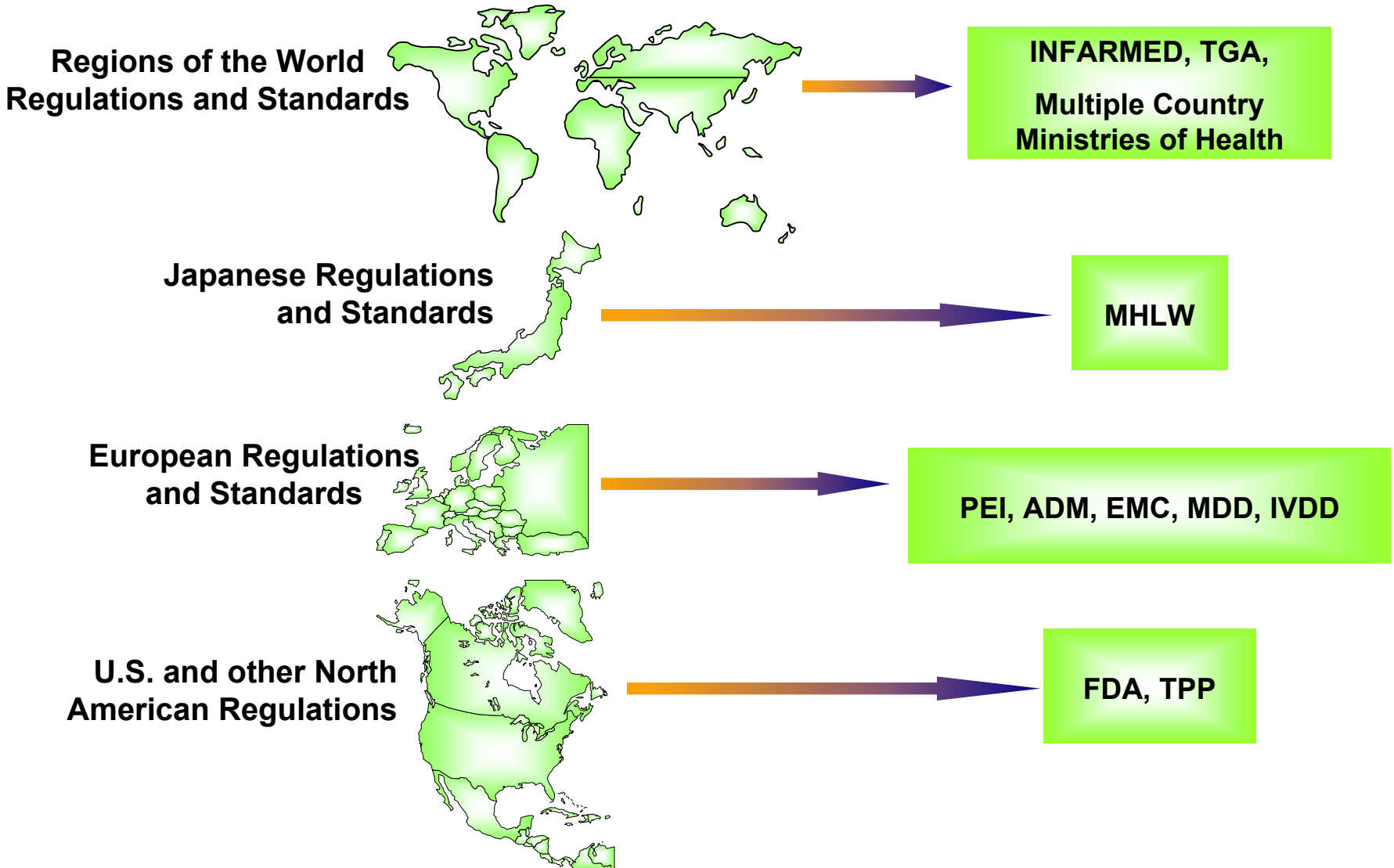
CEO



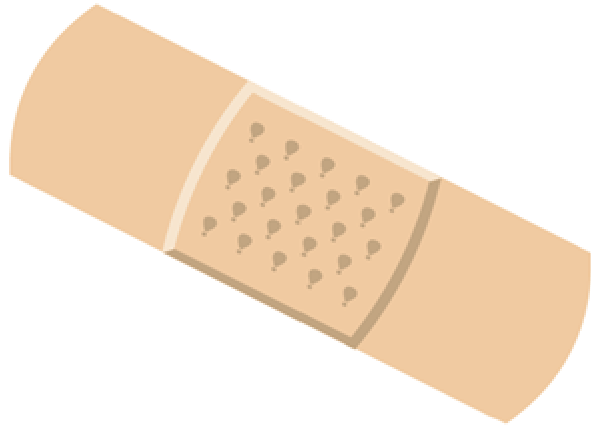
RA/QA



Regulatory Global Requirements



Regulations are Vague Devices are Broadly Defined

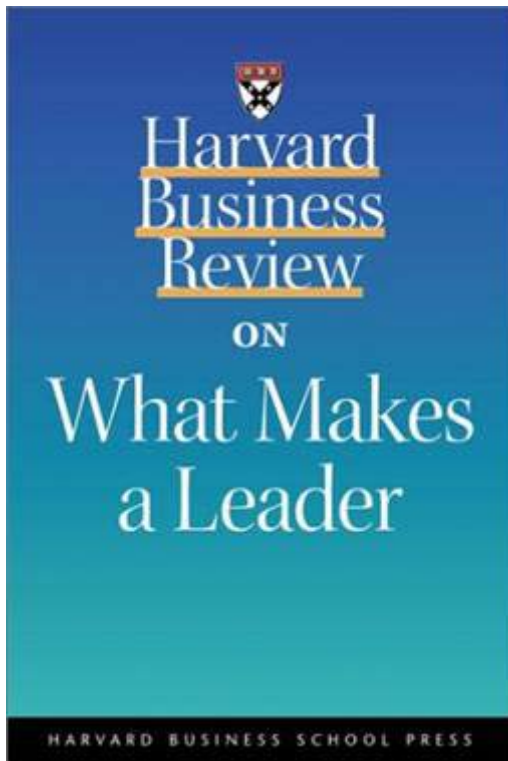


**Interpretation
of Regulations**



What's Your Focus

Business or Compliance First ?



Are the **Customer** and **Patient** at the center of your universe?



What is QA/RA role in the Enterprise ?

Where do you add Value ?

Old thinking

- Police mentality
- Bottleneck (barrier)
- Problem-focused inspectors
- Paper-oriented

New thinking

- Advisor, counselor and coach
- Add value to organization
- Provides confidence and consistency
- A tool for business improvement
- Speeds time to market

Best Practices in Communication: Closing the Gaps

Top Management Language Integrates:



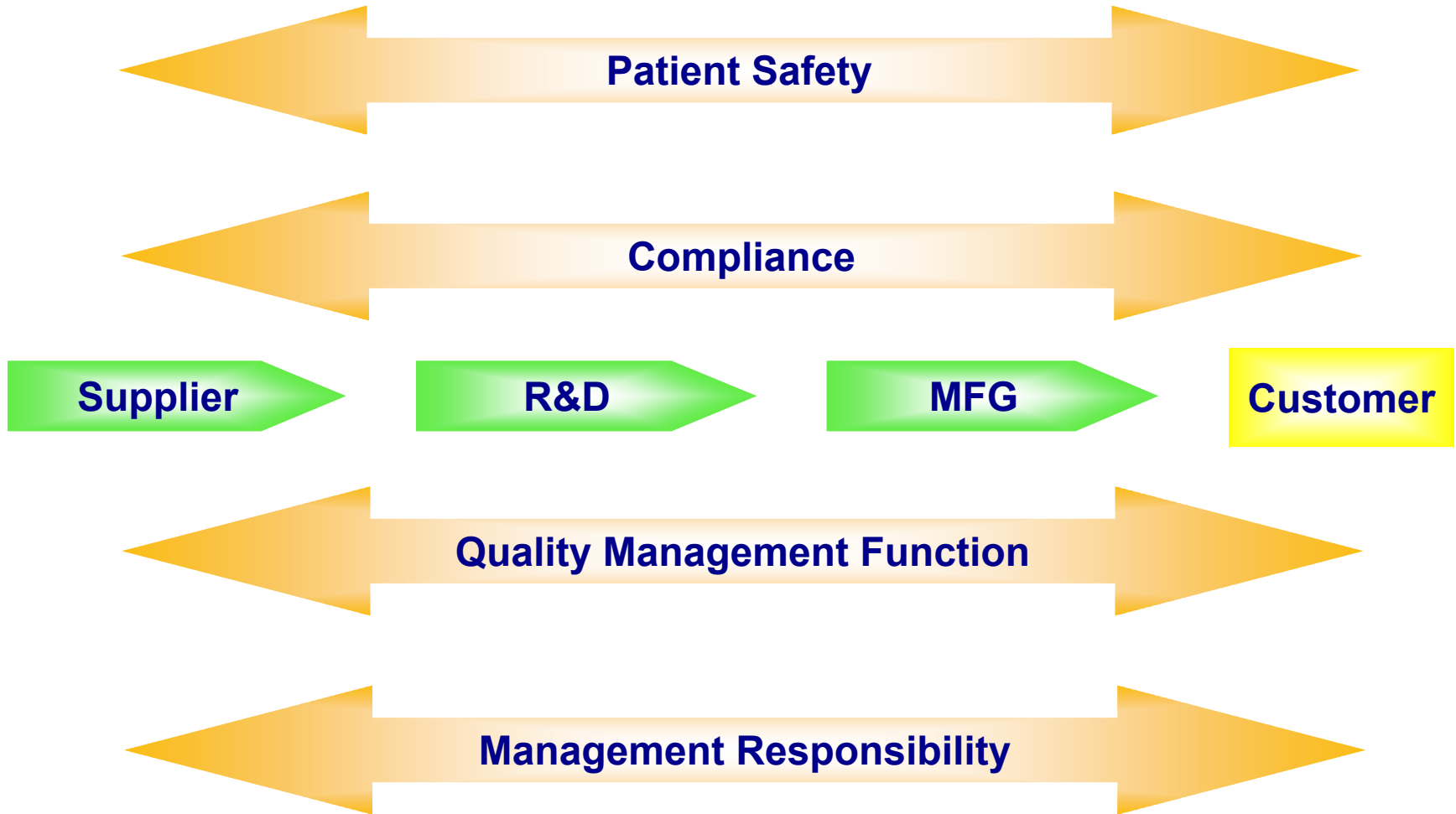
How?

Consider....

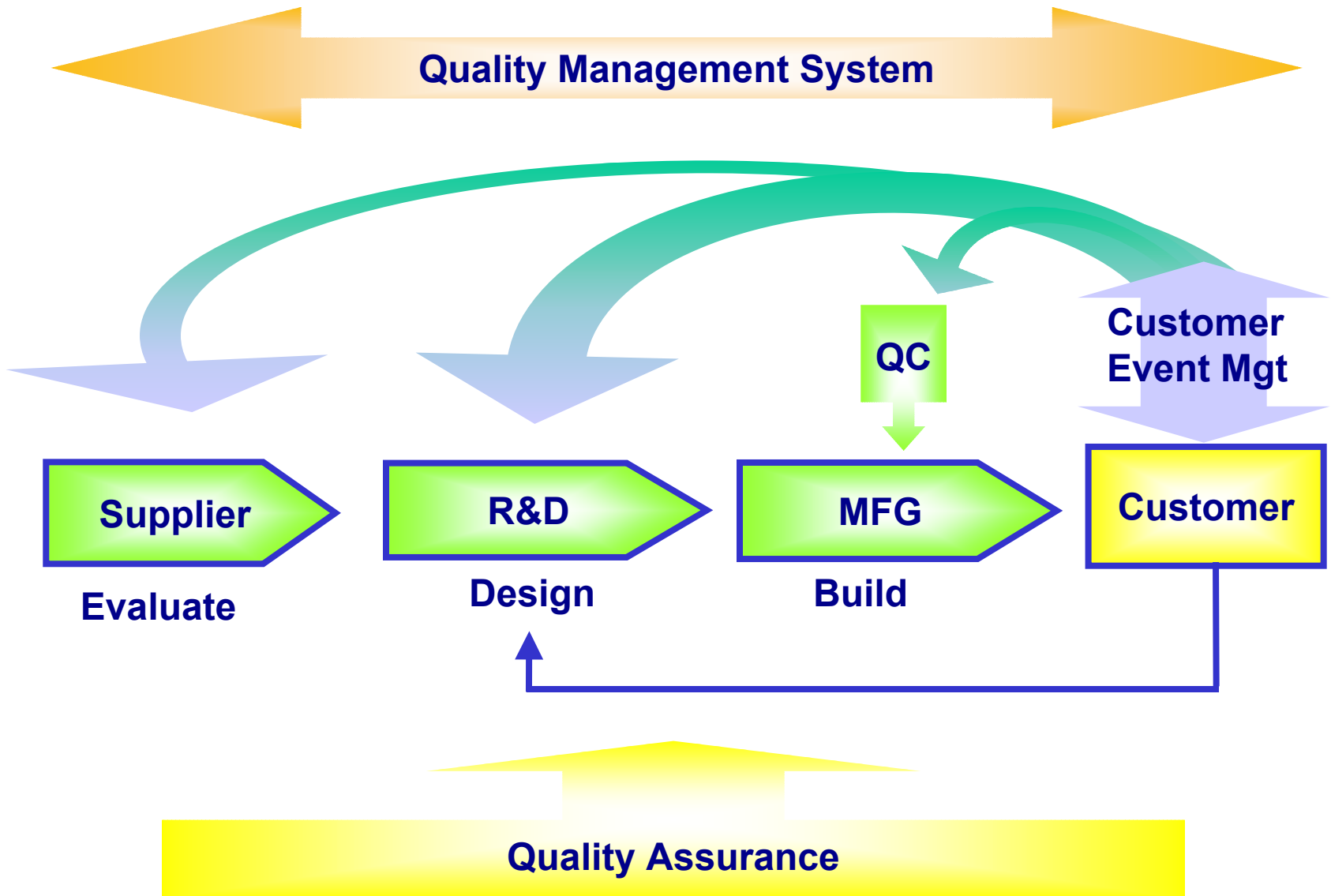
Quality is more than just products...



Design Quality Systems Outside In



Four Pillars of the Quality Management System



Define Responsibilities by Value Added in Each

Regulatory Affairs

Pre-market Role

- Worldwide Regulatory Plans
- Regulatory Filings
- Preparation and filing of X-US Dossier
- Interaction with Europe, Japan, Canada and ROW RA Colleagues to support X-US Registration

Post-Market Role

- Assist in FDA audits
- Advocacy
- Import/Export Mgt.
- Regulatory reporting (MDR, Vigilance)
- Adverse information management

- Product Registrations

Supplier

R&D

MFG

Customer

- Supplier Audits
- Quality Cost Delivery

- Design Control: Design Validation
- Quality Plan
- Reliability: Data review for translation to claims
- Documentation: Assurance DMR in order

- Review supplier performance, seek corrective action
- Finished goods release
- Change control management
- Documentation management
- Process Control: Review, approve, monitor validation plan

- Customer Event management
- Quality monitoring tools development and implementation

Quality Assurance

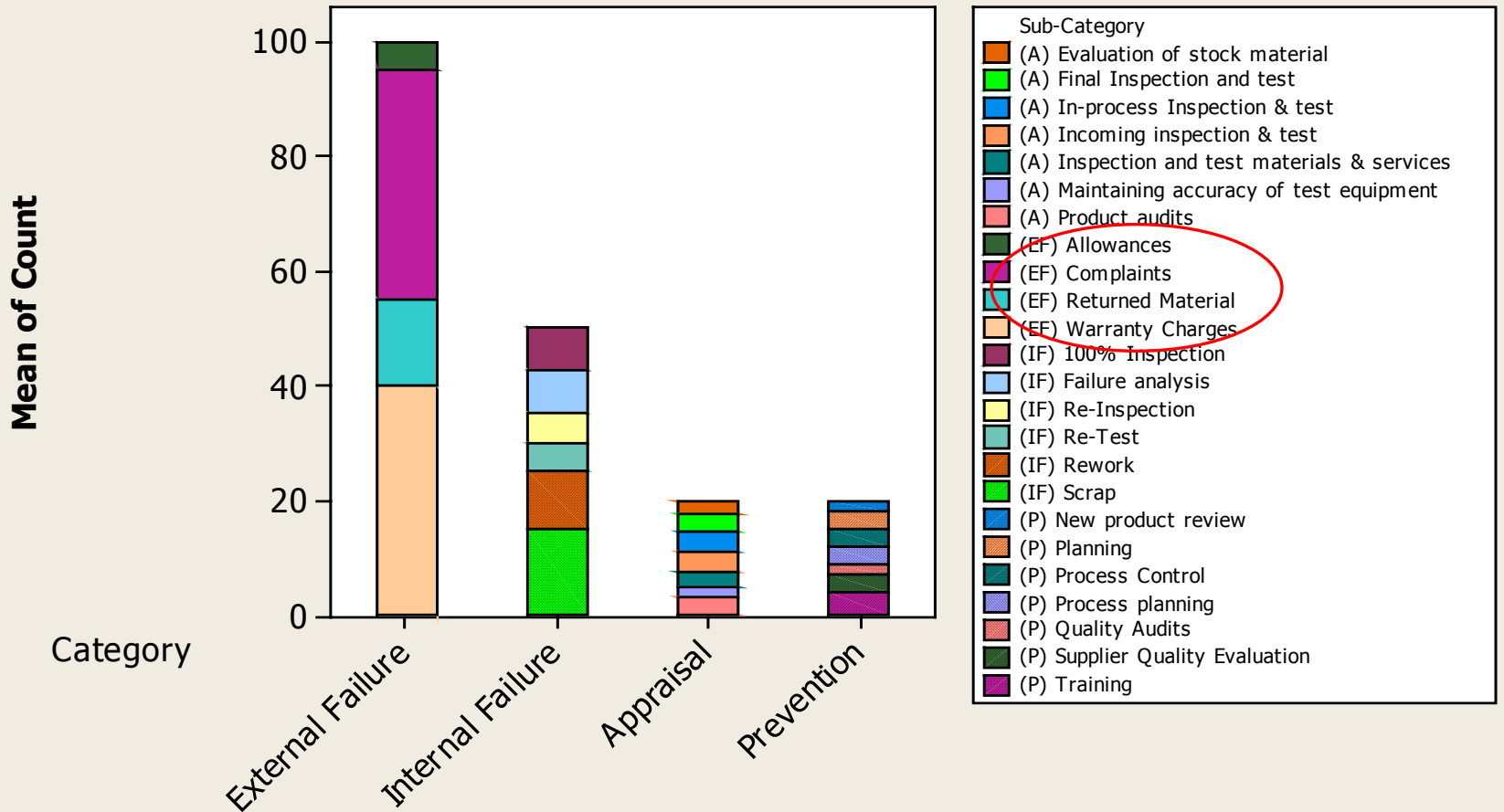
Cost of Poor Quality



- The costs associated with poor quality are not readily identifiable.
- There is a significant business & customer benefit to determining the true COPQ and taking actions to prevent these costs.

Sub-Categories of COPQ Cost

Chart of Mean(Count) vs Category, Sub-Category



Utilize Management Review



- **Prepare Agenda**
 - Practice, Drill, Rehearse
- **Use Executive Language**
 - Quantitative
- **Make it a Business Plan**
 - Encompasses 3Ps
 - Multiple Choices
 - Make a Commitment

Utilize Management Review

Make it Interactive

- Are they Reading or Thinking?

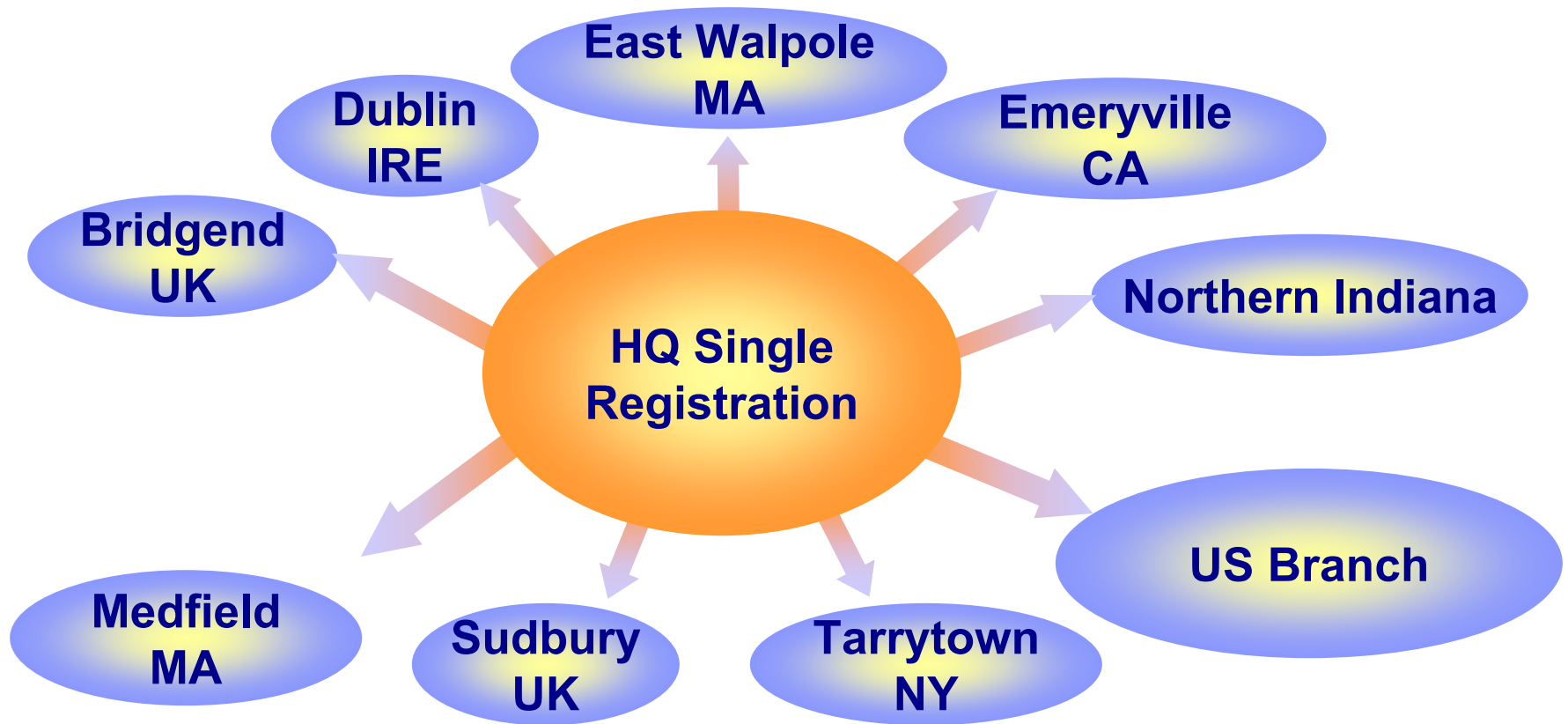


Step 1

- **Drive Commercial Understanding into your organization**
- **Is your QA/RA group a stereotype?**
- **Hard to develop from within, likely need external infusion.**
- **Attract the brightest and best**

Best Practices: Results

Single Quality System



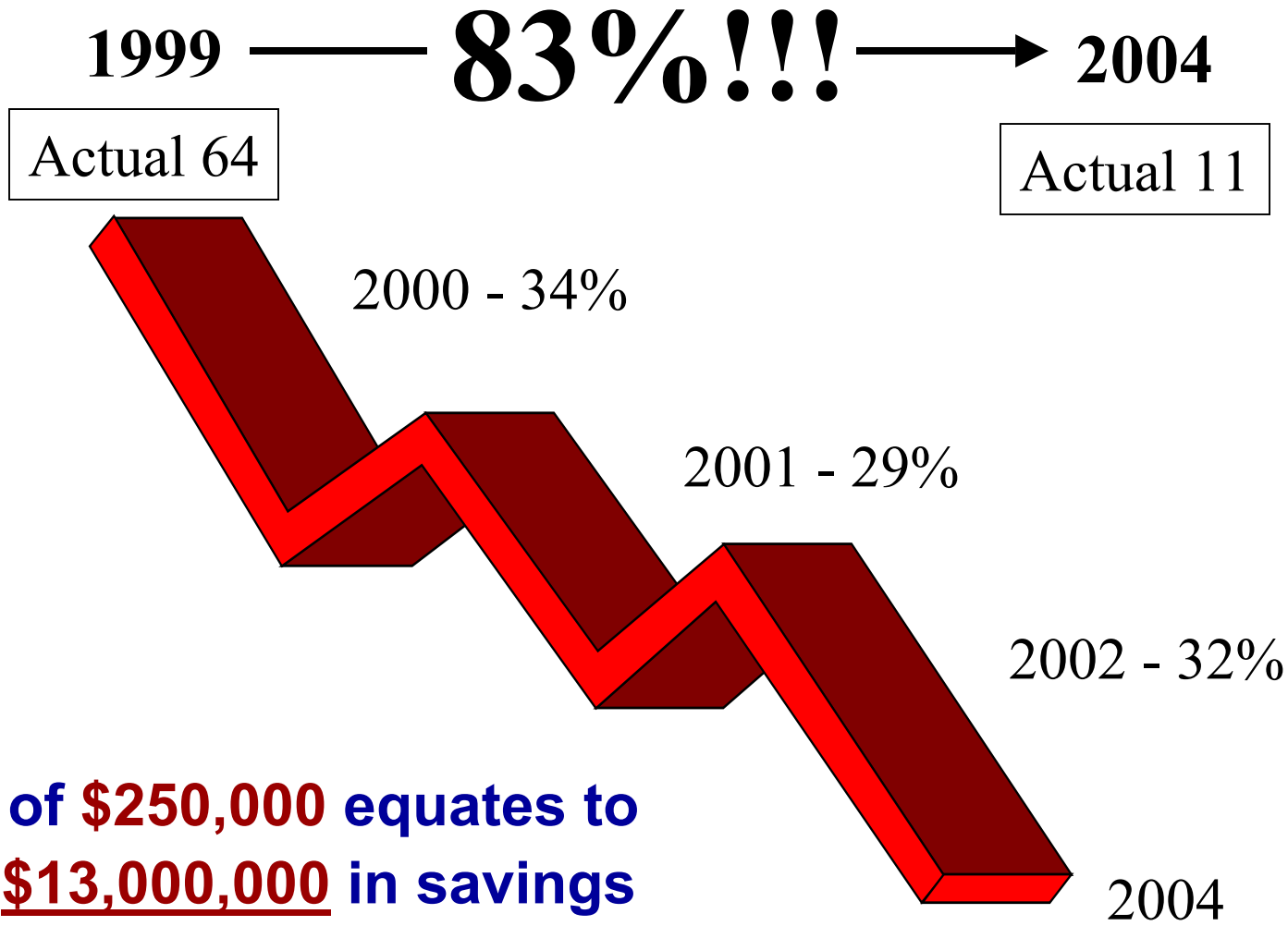
Single Global ISO Registration - Significant Benefits for the Business

Single Quality System

THEN  **NOW**

- | | | |
|---------------------------------|--------|---------------------------------|
| • Fragmented Systems |> | • Centralized, Single System |
| • Excessive Documentation |> | • Simplified Documentation |
| 10 Quality Manuals | | 1 Quality Manual |
| 280 GSOP's | | 22 GSOP's |
| • Compliance through Inspection |> | • Compliance through Prevention |
| • U.S. Focus |> | • Global Focus |
| • Internal Focus |> | • Customer Focus |
| • Lacking Key Metrics |> | • Global Key Metrics |
| • No Cost of Poor Quality |> | • Reduced Poor Cost of Quality |

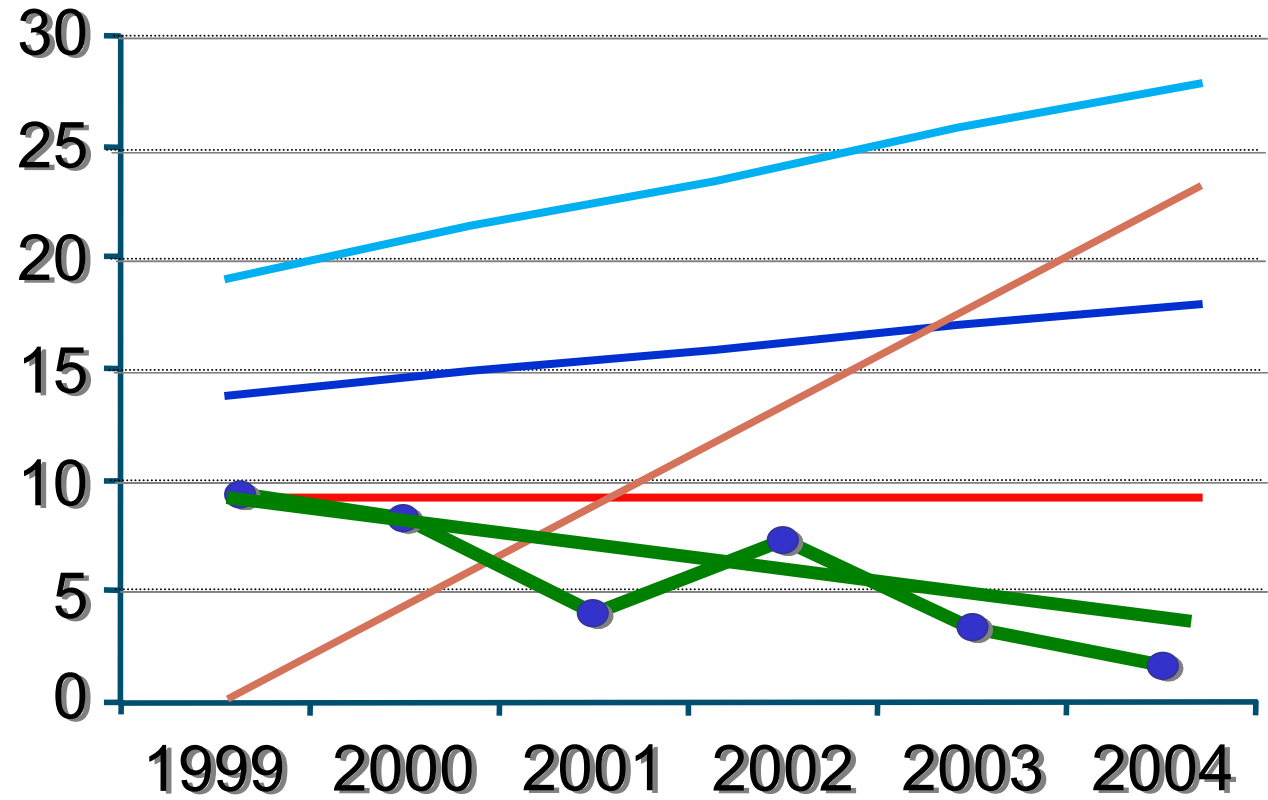
Reduced Field Corrective Actions



Cost of \$250,000 equates to over \$13,000,000 in savings through FCA prevention.

Reported Device Recalls Reported 1999 - 2004

No. of Recalls

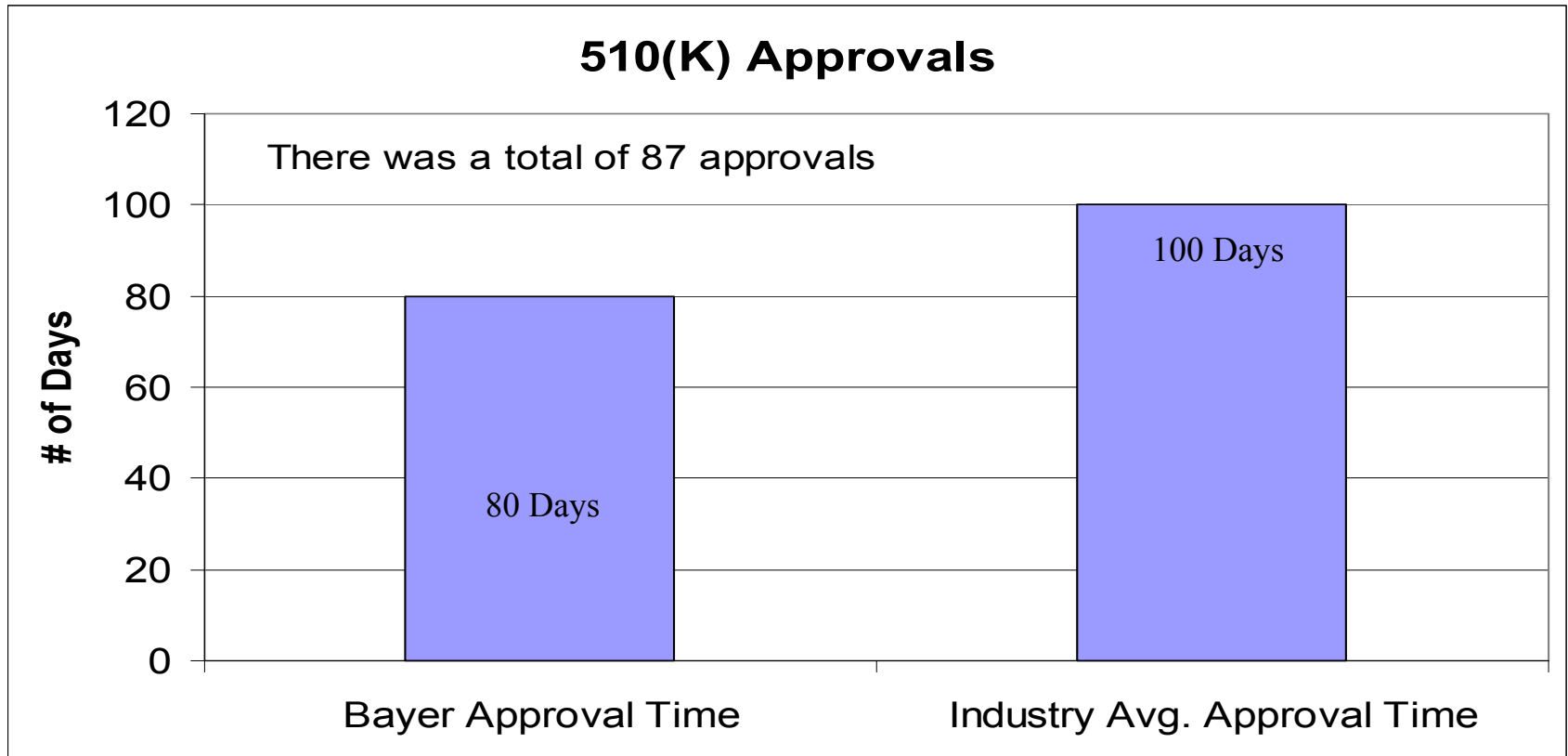


Johnson & Johnson



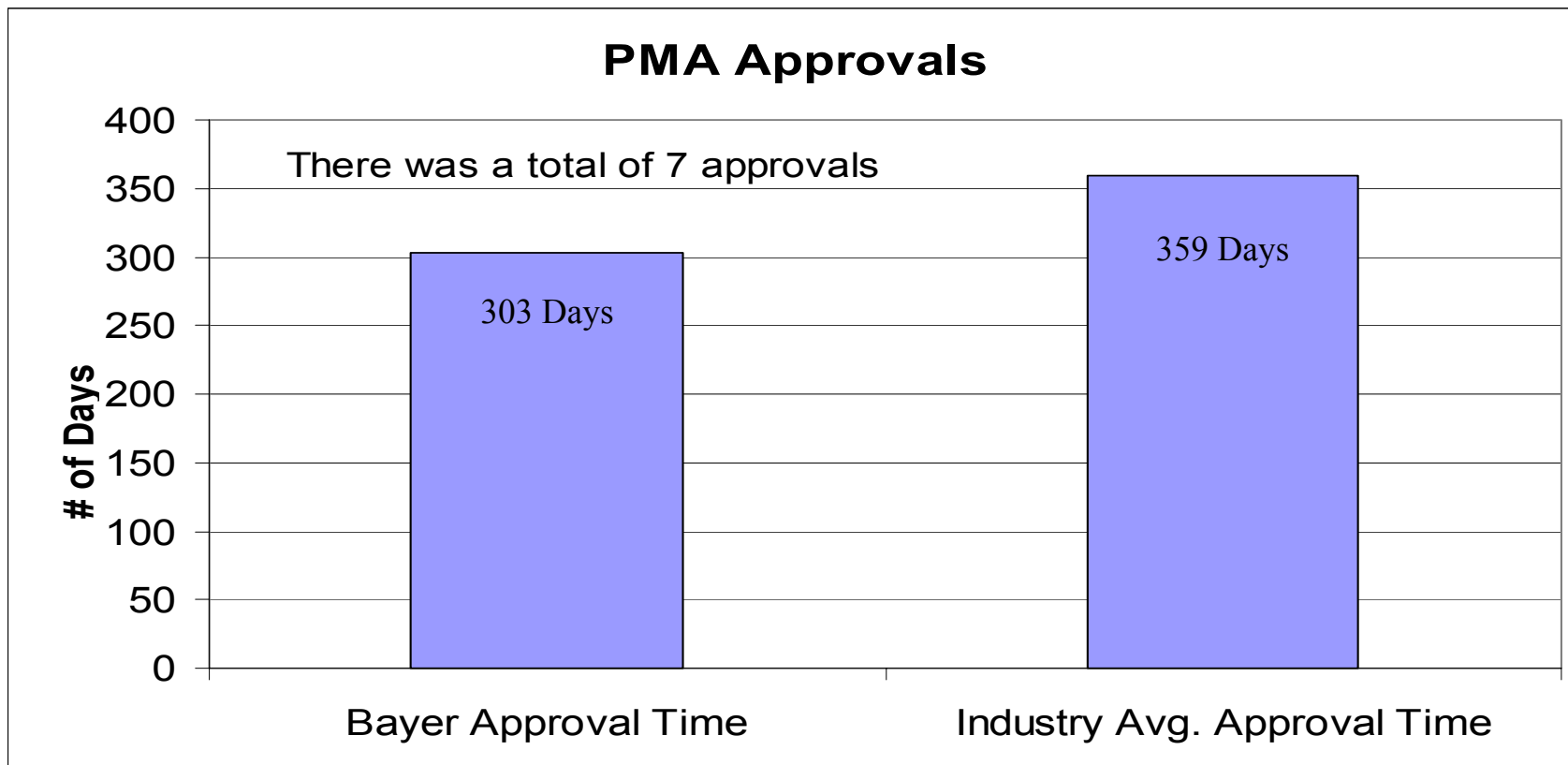
DS and DC 510K Approvals

Bayer Surpasses Industry Avg. 20%!!!



DS PMA Approvals

Bayer Surpasses Industry Avg. 16%!!!



Bayer Diagnostics Audit Success

18 FDA inspections in the last 4 years

60% of Inspections with NO 483's

Messages to Take Away

Where are challenges today?

Customer

- Demanding shorter time to market for innovative new products

Markets

- Investors are rewarding companies not only with strong research and development pipelines but the ability to **commercialize**
- Best-in-class companies leverage **quality** as a **business advantage** in highly competitive markets

Regulatory



- Tightening regulations on manufacturing and process control
- Consumers are demanding greater protection and safeguards.
- Liability resulting from regulatory penalties (fines, market perception, jail, etc.)

Medical Devices

Companies

- Increased Merger & Acquisition activity
- Funding of R&D through profitable **commercial operations**

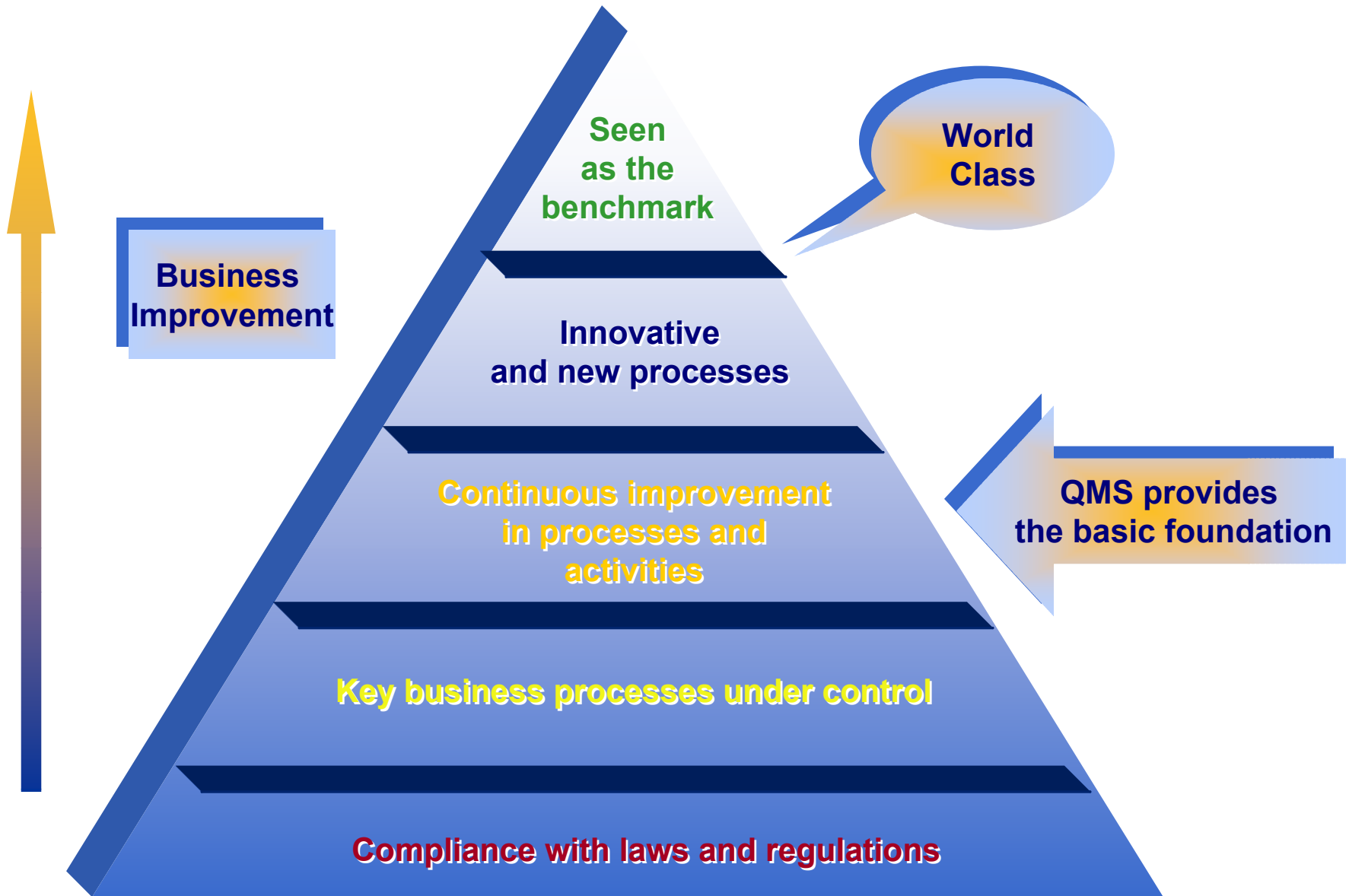
Executive Needs of QA/RA Professionals

- ✓ **Strategist**
- ✓ **Partner**
- ✓ **Systematic Communication**
- ✓ **Logical Metrics**
- ✓ **Set an Example**
- ✓ **Trusted Advisor**
- ✓ **Recognize Progress**
- ✓ **Incent Success**
- ✓ **Independent Review**
- ✓ **Teach Others**

Top Management Language Integrates:



Compliance is only a Baseline for Success



Best Practices For Effective Communication

- Management Review: Effectiveness of Quality System in Adding Value to the Business
- Cost of Poor Quality
- 6 Sigma
- Effectiveness of Internal Audit and Risk Management
- Improvement of Customer Satisfaction