ISO Management System Standards, ISO 9001 and the Future

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Established Management (system) standards

ISO 9000 – Quality
ISO 14000 – Environment
IEC 60300 – Dependability
ISO/IEC 27001 – Information Security
ISO 20000 – IT Services
ISO 30300 – Records Management
ISO 10006 – Quality in Project management
ISO 10007 – Configuration management
ISO 28000 – Security in the supply chain
ISO 30000 – Ship dismantling
ISO 31000 – Risk Management
ISO/IEC Guide 73 - Risk Management Terminology
ISO 22000 – Food Safety
ISO 15161 – Food Safety (ISO 9000 and HACCP)

Established standards – continued

ISO 26000 – Social responsibility
IEC 62402 – Obsolescence management
ISO 50000 – Energy management
ISO 20121 – Sustainable Event management
ISO 22301 – Business Continuity management
ISO 21500 – Project management
ISO 39001 – Road Traffic Safety management

ISO 9000 Sectoral documents
ISO/TS 16949 – ISO 9000 Automotive
ISO/TS 29001 – ISO 9000 Oil and Gas
ISO/IEC 17025 – Laboratories (and ISO 9000)
ISO 13485 – Medical devices (and ISO 9000)
ISO/IEC 90003 – ISO 9000 Software
ISO/IWA 1 – ISO 9000 Healthcare
ISO/IWA 2 – ISO 9000 Education
ISO/IWA 4 – ISO 9000 Local Government

Under Development
ISO 55001 – Asset management
ISO 37500 – Outsourcing
ISO/TR 18155 – Human Resources
ISO 9001 (revision)
ISO 14001 (revision)

Outside of ISO /IEC

Malcolm Baldrige quality award, EFQM, Deming Prize

ILO OSH 2001/ BS 8800 / OHSAS 18001 – Occupational Health and Safety

SA 8000 – Social Accountability

AS 9000/EN 9100 – Aerospace quality

FIDIC Guide on quality for Consulting Engineers

International Martine Organization quality documents

Chemical industries – Responsible cares (an IMS programme)

CMMI – software

IAEA – quality standards

UN de-mining quality standards

Other IEC, CEN and CENELEC MSS

Many other fields of management systems are now being standardized at a national level

AS/NZ 4360 or PD 6668 – Corporate governance

PD 75000 - Knowledge management

BS 7000 - Design management

Will these end up at ISO in the future ?

What should be the overall objective in managing these standards ?

• Compatible
(no conflicting requirements – current situation)

• Aligned
(standards with similar clause sequences and text)

• An "Integrated" standard ?
(one standard for all management disciplines)

An "Integrated" standard ?

Many commentators want 9001/14001/18001 integrated into an "IMS"

Do we reject this argument, as it seems to be merely pushing for reduction in certification costs ?

Should our aim be for organizations to achieve "true" integration of their individual management systems ?

What other fields would have to be taken on board for "true" integration ? (finance, personnel, competitor analysis, mergers)

Could we use integration of 9001/14001/18001 as a first step ?

Are there auditors with the necessary competence ?

What is ISO doing about integration ?

ISO has already:

- Required committees to work together co-operatively

- Established Annex SL for the justification and alignment of the structure/contents of MSS

- Asked difficult questions of itself, before looking to see if it should enter into some new MSS fields, e.g. for Social Responsibility

- Developed an ISO Handbook to give guidance on the integration of management system standards

However, ISO has decided that "**alignment**" is the best that can be achieved at this time

Integrated Management Systems Standards (IMSS)

Many countries have draft IMSS prepared

Many International/National trade or professional institutions also have IMSS either published or prepared, e.g. Chemical Industry 'Responsible Care' programme

Majority of the certification bodies are already offering IMS audits and certification

Majority of IMSS are based on a combination of ISO 9001, ISO 14001 and OHSAS 18001

What do you need to examine in the standards for Integration ?

Across the standards, you need to examine their:

- Basic principles

- Terminology

- General management system requirements

- Technology specific requirements

- Structure

Basic principles – ISO 9000 versus EFQM

ISO 9001	EFQM
Customer focus	Customer focus
Leadership	Leadership & Constancy of purpose
Involvement of people	People Development and Involvement
Process Approach	Management by Processes and Facts
Systems approach to management	
Continual Improvement	Continuous learning, Improvement and Innovation
Factual approach to decision making	Management by processes and Facts
Mutually beneficial supplier arrangements	Partnership Development
	Corporate Social Responsibility
	Results orientation

Basic principles

Conclusion – the principles are very similar at an operational level

Terminology

Many similar terms are used in the differing standards, however, their definitions appear to vary considerably.

Is this a problem ? Answer = No

Why not ? Because the underlying intent, or concept, of the definitions are generally very similar

General management systems requirements

Policy

Planning

Implementation and operation
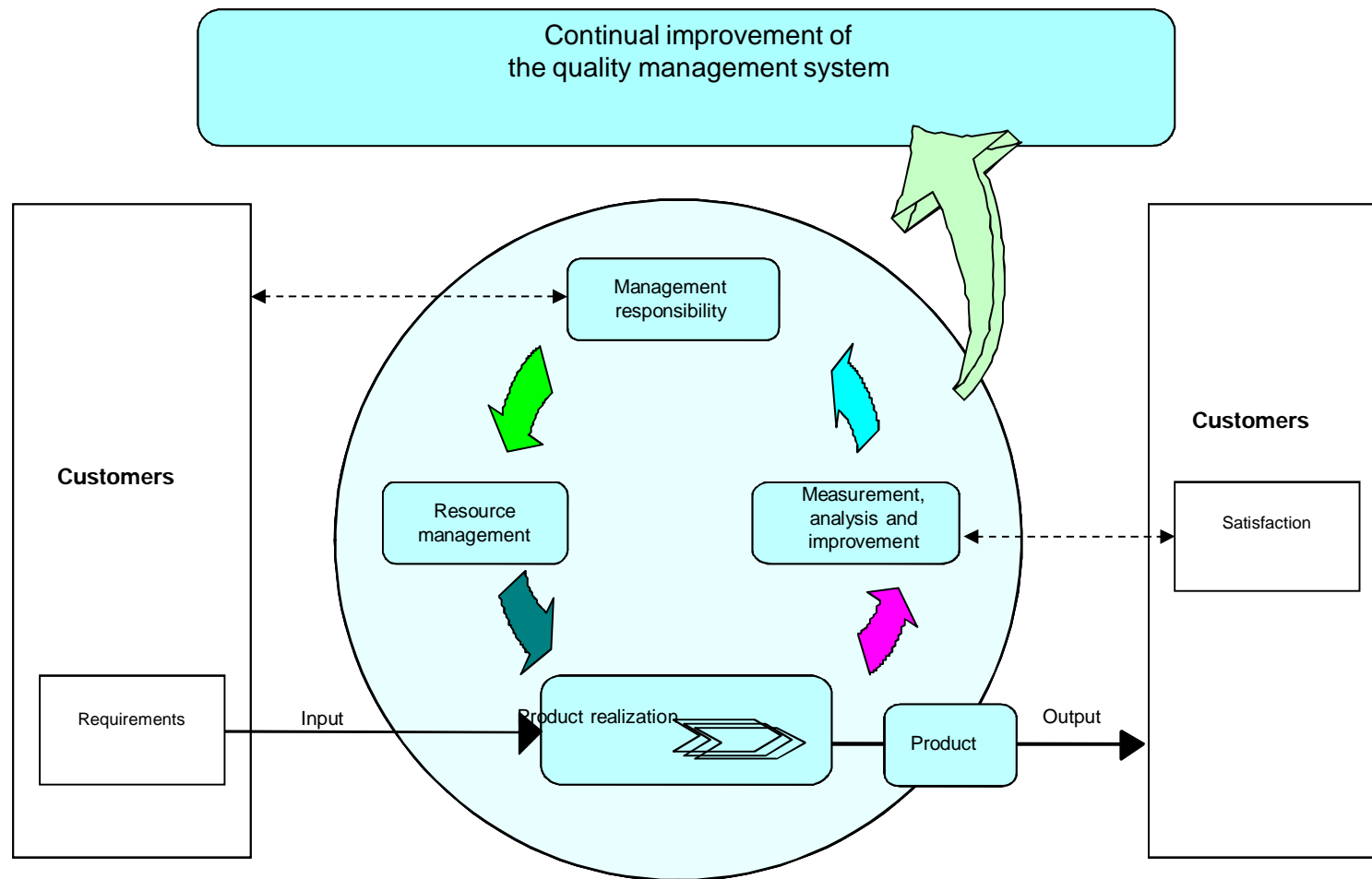
Improvement

Management review

(See ISO Guide 72)

OHSAS 18001 – Annex A.1

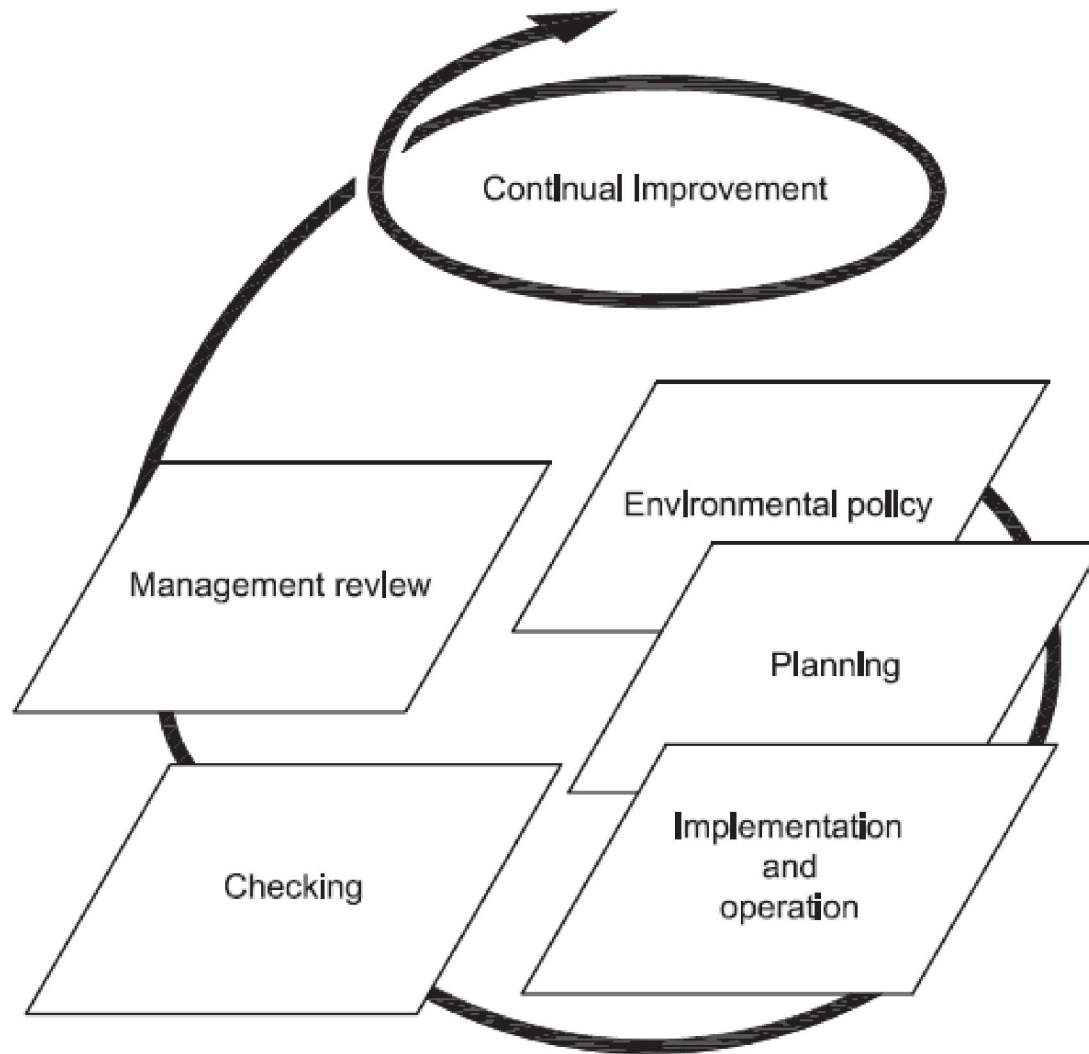| OHSAS 18001:2007		ISO 14001:2004		ISO 9001:2000	
—	Introduction	—	Introduction	0 0.1 0.2 0.3 0.4	Introduction General Process approach Relationship with ISO 9004 Compatibility with other management systems
1	Scope	1	Scope	1 1.1 1.2	Scope General Application
2	Normative references	2	Normative references	2	Normative reference
3	Terms and definitions	3	Terms and definitions	3	Terms and definitions
4	OH&S management system elements (title only)	4	Environmental management system requirements (title only)	4	Quality management system (title only)
4.1	General requirements	4.1	General requirements	4.1 5.5 5.5.1	General requirements Responsibility, authority and communication Responsibility and authority
4.2	OH&S policy	4.2	Environmental policy	5.1 5.3 8.5.1	Management commitment Quality policy Continual improvement

Similar tables exist in ISO 9001 and ISO 14001
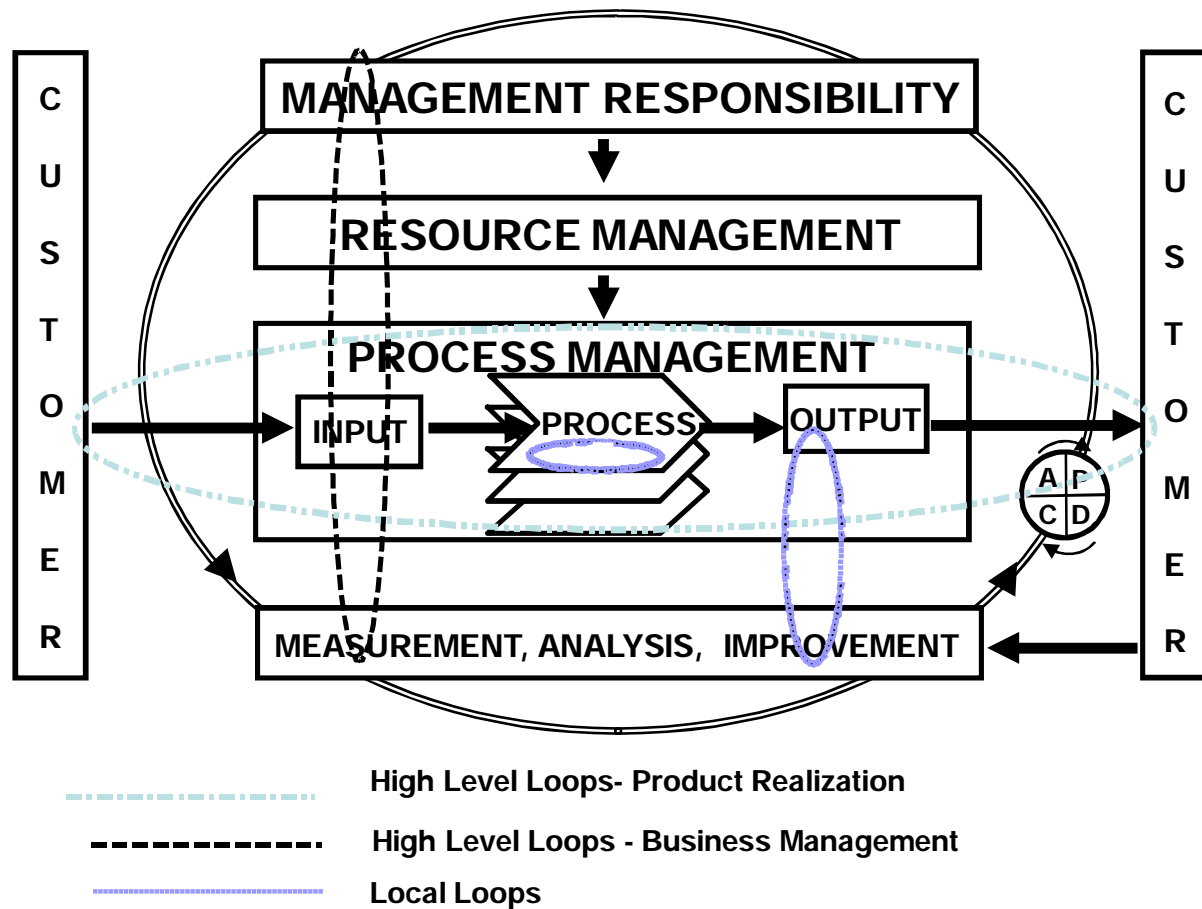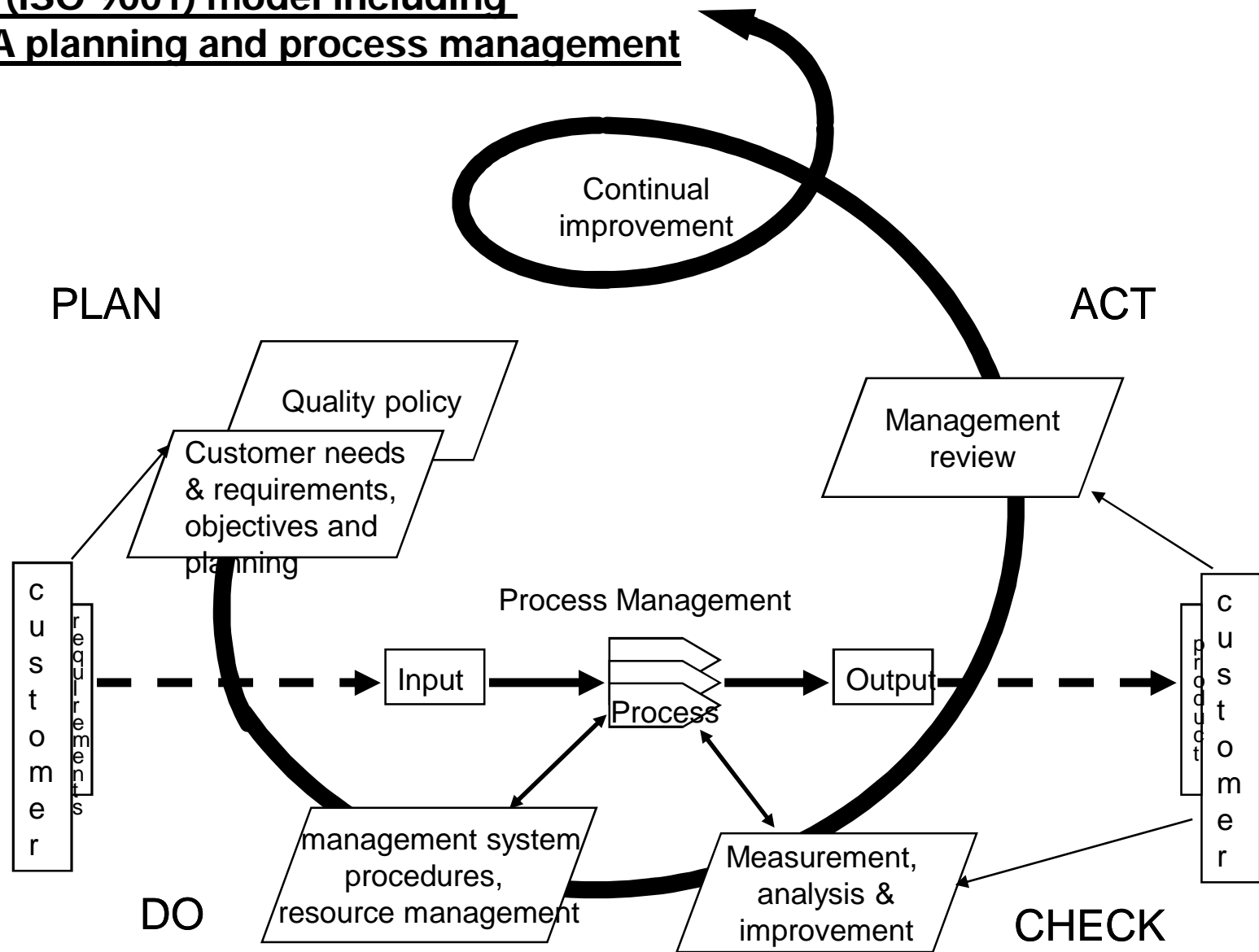
Structures

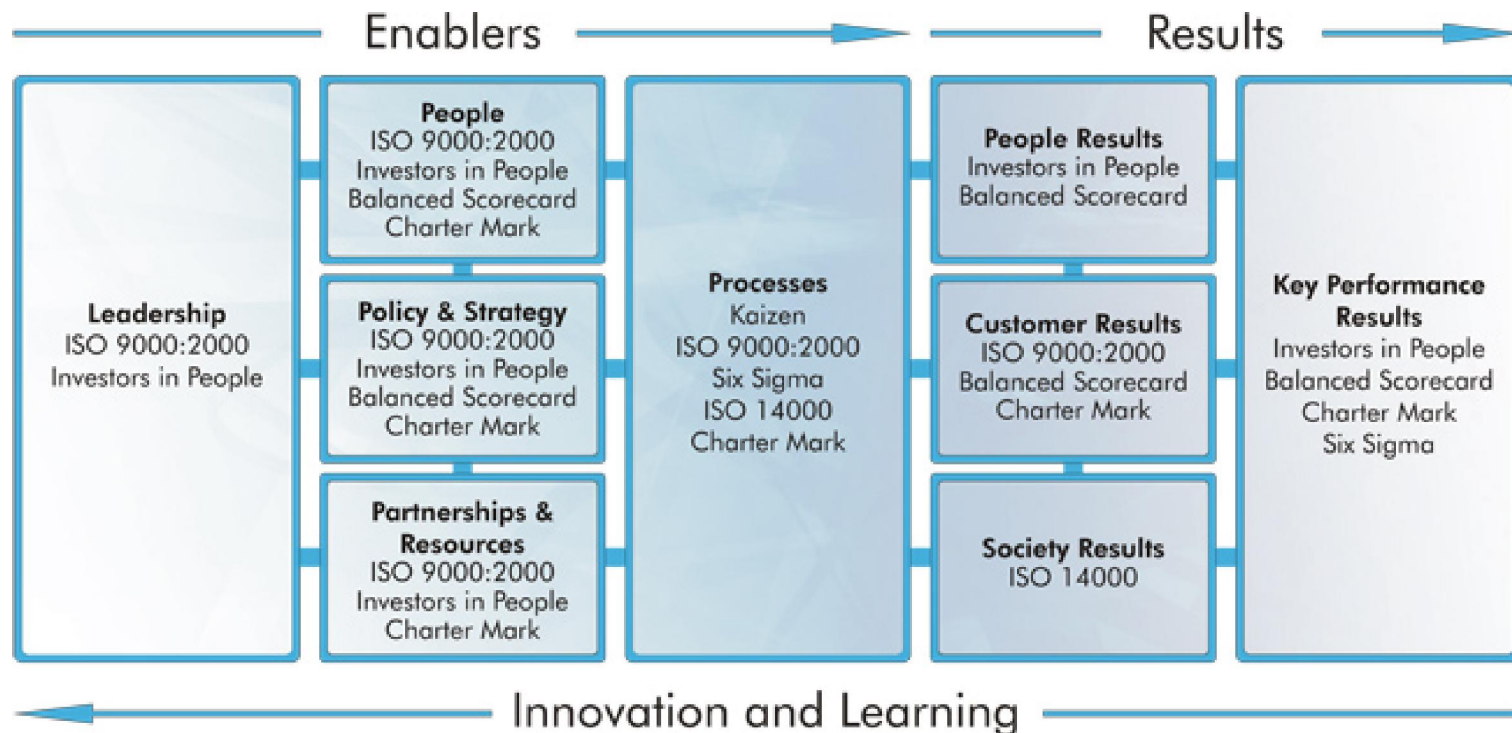## ISO 9000 Process Approach structure

ISO 14001 PDCA type structure

9001 Process approach structure embodies PDCA

High Level Loops- Product Realization

High Level Loops - Business Management

Local Loops

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QMS (ISO 9001) model including PDCA planning and process management

PLAN

ACT

Continual improvement

Quality policy

Customer needs & requirements, objectives and planning

Management review

customer requirements

Process Management

Input → Process → Output

customer product

management system procedures, resource management

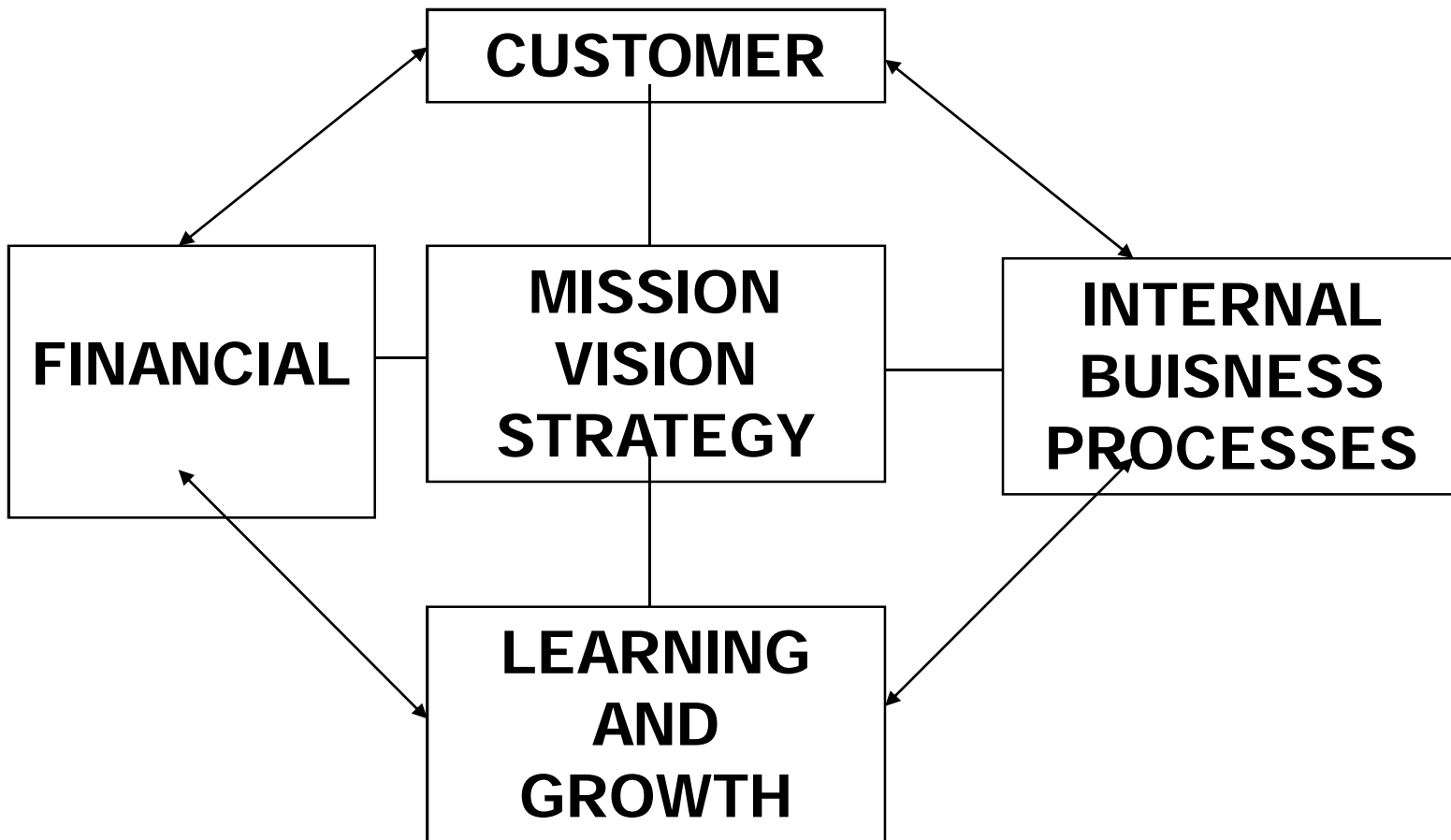Measurement, analysis & improvement

DO

CHECK

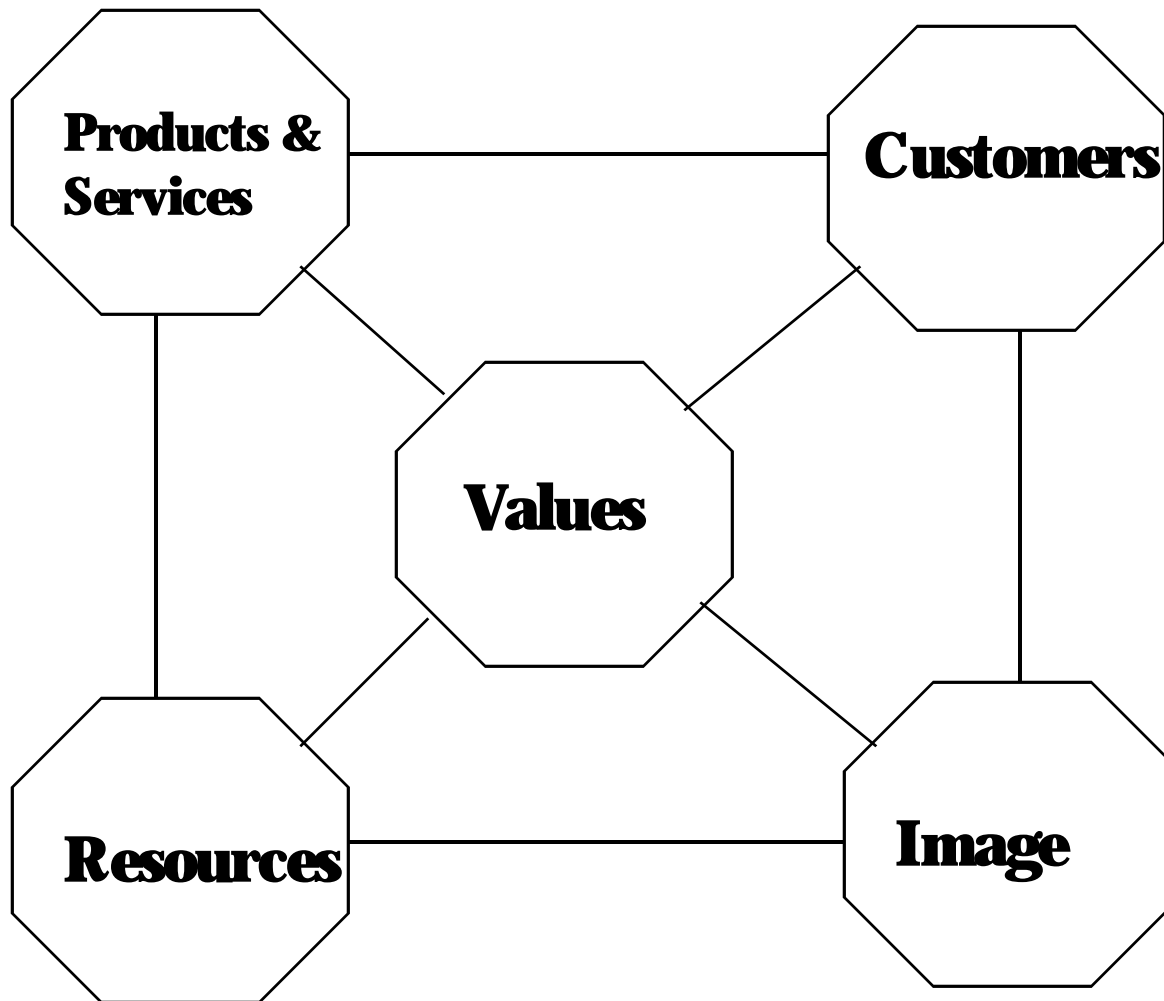# European Foundation for Quality Management (EFQM) Business Excellence Model

Balanced Scorecard
- Strategic Perspectives

The Business Idea of the Firm

Business Model

Strategy

Organization structure

Market

Corporate culture

Competence & Physical resources

Activities/ Processes

Products (Price, Costs, Quality)

Means of control

Competitive Environment

Road Map Model

Road Map Model pyramid diagram showing: Customer at the top, Fundamentals in the center, Continuous Improvement on the lower left, Total Participation on the lower right, and Mutual Learning along the base.
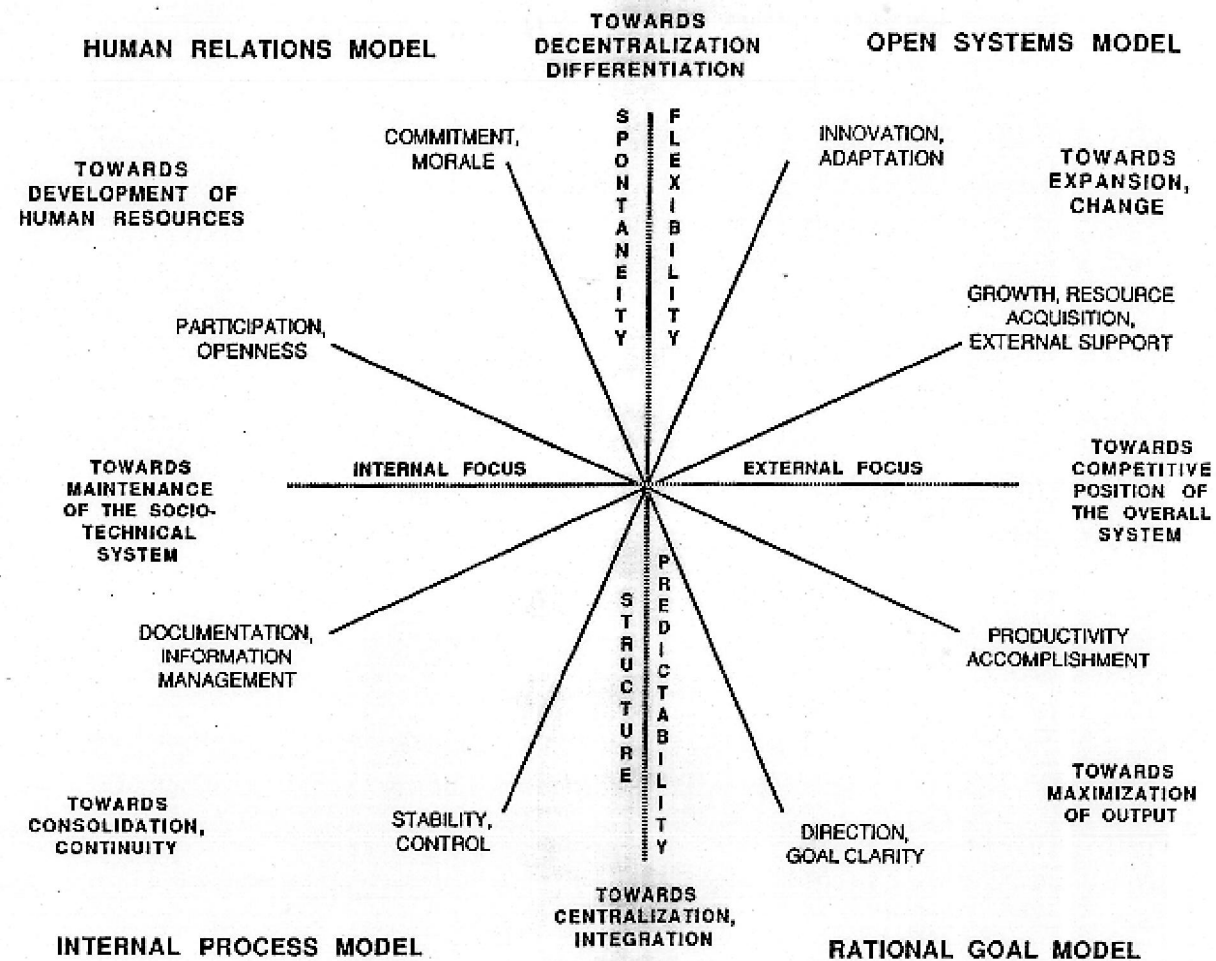
Other Structures

Structures – conclusion

Structures themselves are a conceptual way of showing how the various management system elements fit together to form a "system".

They also attempt to show that individual elements of the "system" cannot be treated in isolation, but have to be taken together. The "system" will fail, if any one of those elements is ignored.

The structures themselves are not a requirement to which compliance has to be achieved.

Each representation has its own merits.

Overall Conclusion

Your organization's management system will be unique.

Understanding the intention behind the management standards will enable you to incorporate their requirements into your organization's management system in a planned and consistent manner.

Business efficiencies can be achieved through the use of a fully integrated system, that balances the demands of your different stakeholders.

ISO 9001 and the future

The future for ISO 9001

For the standard, several issues have to converge

• Alignment with other MSS (e.g. ISO 14001)

• Improvements in Quality technology

• Finding out what users want

But what about certification ? Can this be changed also ?

ISO/TMB/TAG13-JTCG "Joint Vision"

All ISO management system "requirements" standards will be aligned and ISO will seek to enhance the compatibility of these standards, through the promotion of **identical**:
• *Clause* titles
• Sequence of *clause* titles
• Text, and
• Terms and definitions
that are permitted to diverge only where necessitated by specific differences in managing their individual fields of application.

The use of this approach for future revisions and new management system "requirements" standards will be targeted at increasing the value of these standards to users.

ISO Directives, Annex SL, "High Level Structure"

Introduction
 1. Scope
 2. Normative references
 3. Terms and definitions

 4. Context of the organization
 5. Leadership
 6. Planning
 7. Support *(this includes Resources)*
 8. Operation
 9. Performance evaluation
10. Improvement

Note – no model diagram is available at this time

## Alignment with other MSS

The ISO/TMB adopted the High Level Structure, identical text and common terms in February 2012.

Key changes include:

- Understanding the organization and its context, and risks

- Leadership

- No reference to documented procedures, "controls" instead

- "Documented information", instead of documentation or records

- "Preventive action" is now embodied in the system

4. Context of the organization

Identify the issues that can affect your organization, and which of those issues the MS needs to control
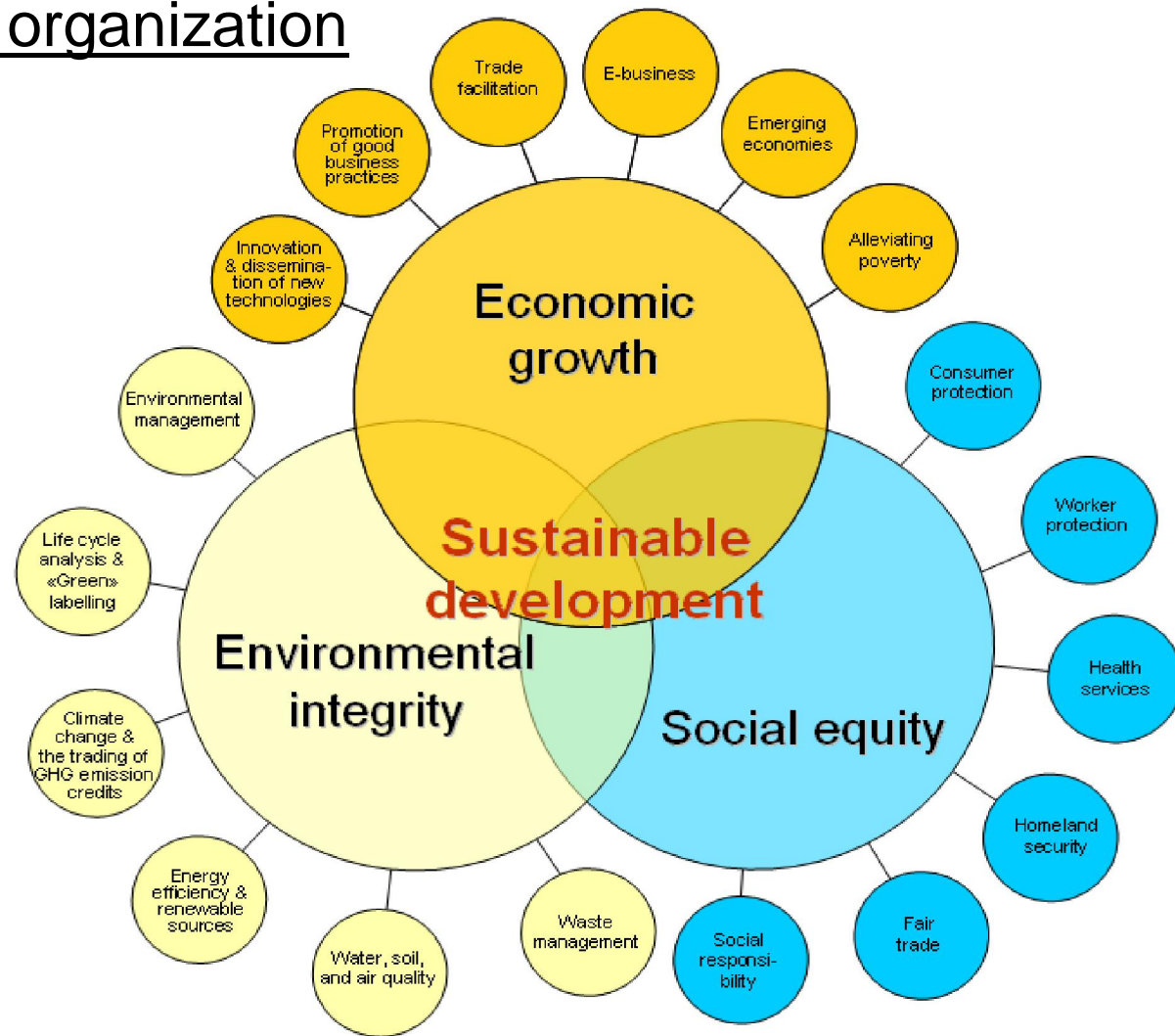
Adding value

- Just fitting the current ISO 9001:2008 into the High Level Structure would not be considered to add sufficient value for many users
(1m ISO 9001 certificates, versus 200k ISO 14001 certificates)

- The revision has to address new quality concepts, and provide a sound basis probably for the next 15 years.

New Concepts

- During 2009 to 2011 brainstorming and research was undertaken on "new concepts" that could be used in ISO 9001(e.g. examining risks)

- These were analyzed and recommendations made
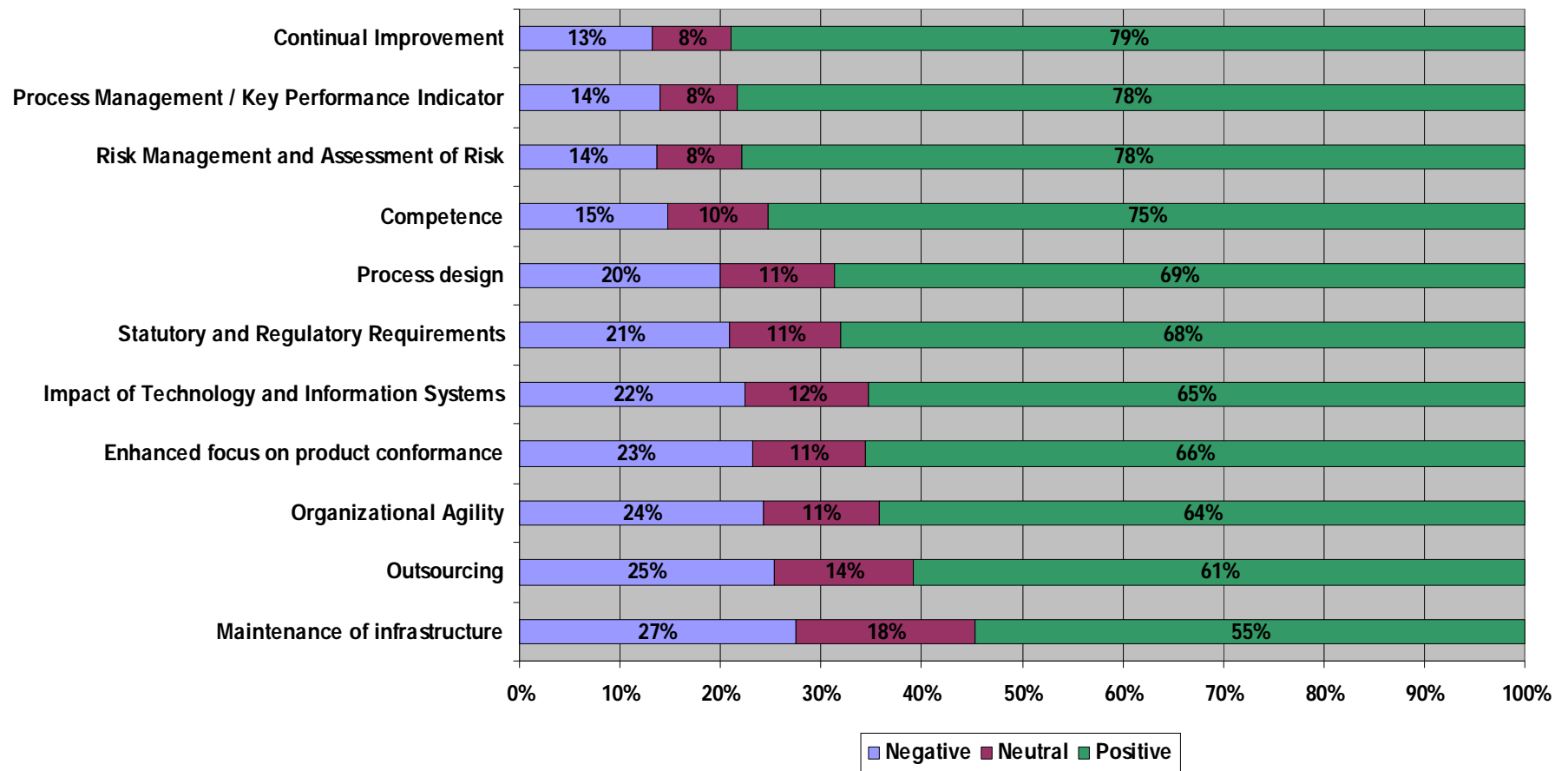- Some were taken into the High Level Structure

Finding out what users want

The ISO 9000 User Survey

- Conducted during 2010 – 2011
- 11, 700 responses
- Tested new concepts with users
- Tested having more than one "requirements" standard (e.g. having ISO 9002 and ISO 9003 again). Clear feedback that only 1 standard is wanted.

11.9 - How important is it to enhance the current content in ISO 9001 with the following concepts in any future revision?
(Based on 8505 answers)

Concept	Negative	Neutral	Positive
Continual Improvement	13%	8%	79%
Process Management / Key Performance Indicator	14%	8%	78%
Risk Management and Assessment of Risk	14%	8%	78%
Competence	15%	10%	75%
Process design	20%	11%	69%
Statutory and Regulatory Requirements	21%	11%	68%
Impact of Technology and Information Systems	22%	12%	65%
Enhanced focus on product conformance	23%	11%	66%
Organizational Agility	24%	11%	64%
Outsourcing	25%	14%	61%
Maintenance of infrastructure	27%	18%	55%

■ Negative ■ Neutral ■ Positive

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ISO/TC 176/SC2/WG24 meeting,
June 2012

- Developed a "Design Specification" for the revision of ISO 9001

- Developed a Project Plan, based on a 3 year development path (i.e. expected publication end of 2015)

- Developed a "Preliminary draft" of ISO 9001 in the Annex SL "High Level Structure"

A "new work item proposal" ballot was then conducted using these as supporting documents

- Set tasks to review the key inputs before the next meeting (in St Petersburg)

ISO/TC 176/SC2/WG24 meeting, November 2012

The "new work item proposal" for the revision was approved

This allowed WG24 to start developing the first formal "Working Draft" of ISO 9001.

We were very pleased by the new ideas being brought forward in the draft, especially in support of service type industries

The Working Draft was circulated only to the members of the WG for comment.

ISO/TC 176/SC2/WG24 meeting, March 2013

The WG is working this week to review the received comments and to produce a "Committee Draft"

The Committee Draft will be circulated to all the members of ISO/TC 176/SC2 by June, including ABNT – CB25. (Please discuss with CB25 how you may participate and receive a copy of the Committee Draft)

Some of the topics being focussed on from the comments include, Products versus services, Design, Outsourcing.

Only 2 more WG24 meetings planned before publication

Design Specification

- ISO 9001 scope to remain unchanged:
  "the achievement of customer satisfaction through the provision of products that meet customer and regulatory requirements"
- ISO 9001should continue to be generic
- Maintain the focus of managing processes
- ISO 9001 should be readily understandable, and translatable.
- ISO 9001 should use the Annex SL "High Level Structure"

Design Specification - continued

The changes to ISO 9001 should:

- be relevant to quality management system requirements

- increase confidence in an organization's ability to provide conforming product and/or service

- enhance an organization's ability to satisfy its customers

- enhance customer confidence in quality management systems based on ISO 9001.

(In contrast)

Suggestions were received to

- Expand the scope to reference sustainability and social responsibility

- Reduce the scope back to focussing purely on quality assurance, not quality management

These were not accepted.

Changes to certification ?

Certification is now a 30 year old business model.
Does it really work ?

Discussions are being held on "Output matters"
i.e. the awarding of a certificate to an organization should be a form
of guarantee that it will produce consistently conforming product.

Involves the standards writers, as well as the accreditation and
certification bodies

Could involve the validation of product with customers by CBs

Discussions already begun on this issue in ISO/TC 176,
ISO/CASCO and the IAF

Changes to certification ? - *continued*

What about a points based scoring system as used by many of the Business excellence models / quality award schemes ?

Currently there is no way of indicating:

- the "maturity" of an organization

- whether an organization has improved or not since its last audit

Other MSS disciplines are also looking at such an approach

Is it feasible to make such a significant change to certification in the time available ?

Keeping informed:

- **ISO's web site (www.iso.org)**

- **Your National Standards Body (www.abntcb25.com.br)**

- **ISO/TC176/SC2 web site (www.iso.org/tc176/sc2/public)**

- **"ISO Focus" magazine**

- **ISO Press releases**

Support

- UBQ - Union Brasilian Quality
- IBS – FGV (fundação Getúlio Vargas)
- Fundação Torino
- Diário do Comércio
- Sebrae
- Gravassom
- Grupo Dirigente Fiat
- Secretaria do estado de Minas Gerais

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Thank you

for your attention

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