



# **Value Adding Quality Management Tools and Solutions**

**Letizia Caccialupi**

- How to perform portfolio analysis in quality departments
- How to conduct pragmatic management review on quality systems
- How to measure the value added by quality management
- Effective dissemination of quality related information

## Value Adding



Companies should allocate resources, time and effort towards activities that increase the value of a firm, brand, products or services as well as eliminate the activities that decrease value.

In concrete terms adding value means improving tangible results, so that the things/relationships/processes actually improve.

## Value Adding - Details



Moreover value added holds two fundamental components:

1. **Relevance:** Relevance encompasses the areas of company vision, firm objectives, customer characteristics and expectations, and the production and delivery processes.
2. **Quality:** Quality refers to the completion of value linked activities to the specific requirements of the firm or the task.

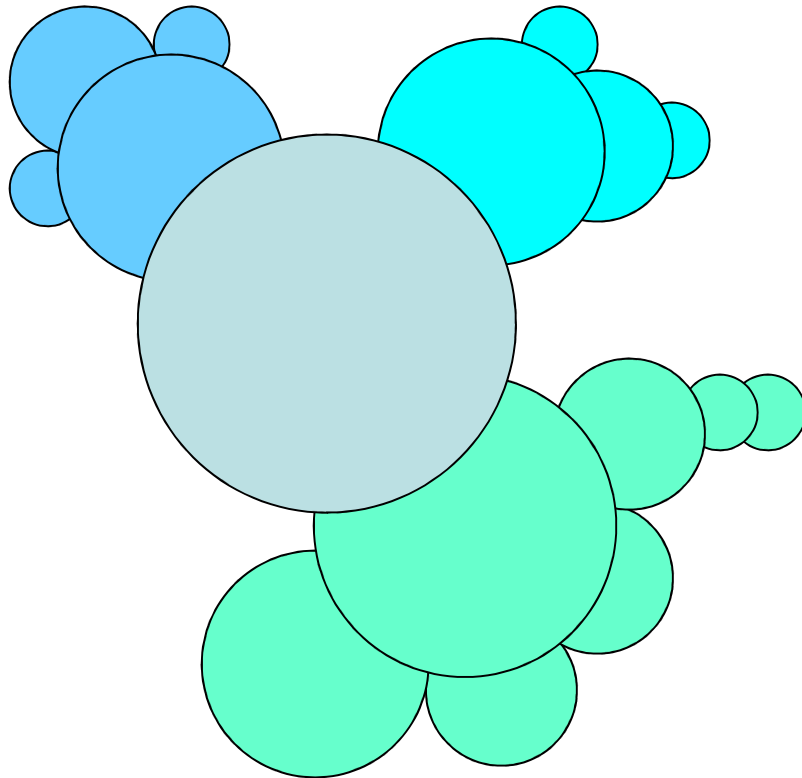
## Value Adding Quality Management



Quality departments have valuable insights into the operation of the business on the one hand (**relevance**) and they also have a comprehensive understanding of problem solving, process improvement, quality management, quality control and quality assurance on the other hand (**quality**).

⇒ **Quality departments are highly qualified for adding value to a company or a product.**

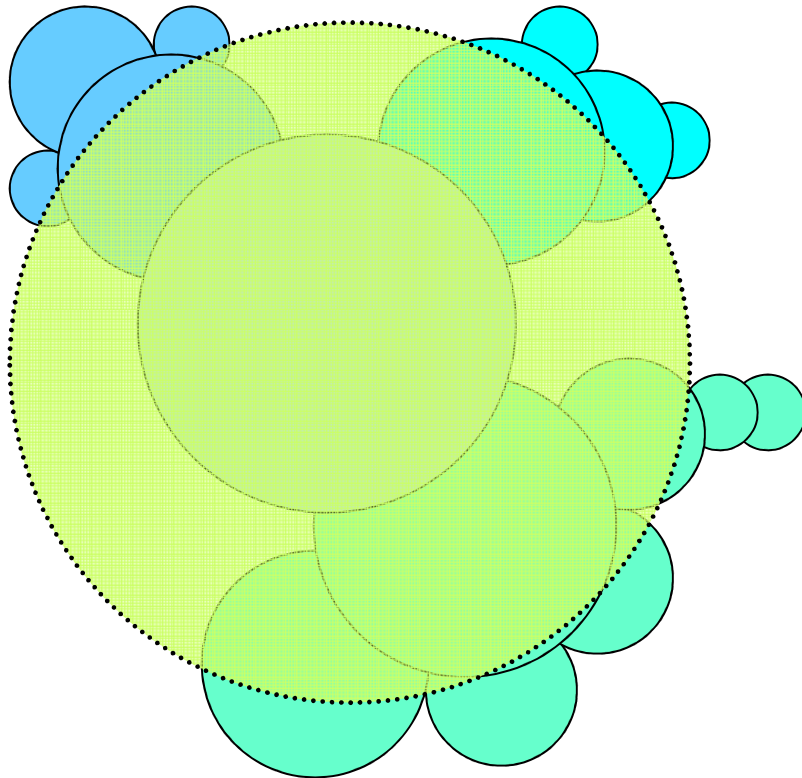
# Assessing Relevance



## Reasons for current status:

- Increasing demands from the authorities
- Additional legal requirements
- Acquisitions
- New business segments
- Requests from the management
- New technical standards

# Assessing Relevance



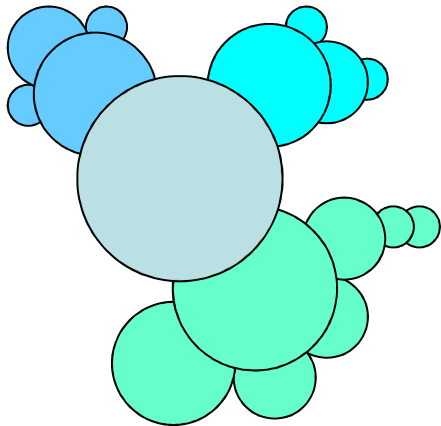
## Reasons for current status:

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- Acquisitions
- New business segments
- Requests from the management
- New technical standards

## Preferable Solution:

- Process Reengineering
  - Mostly not feasible

## Different Approach



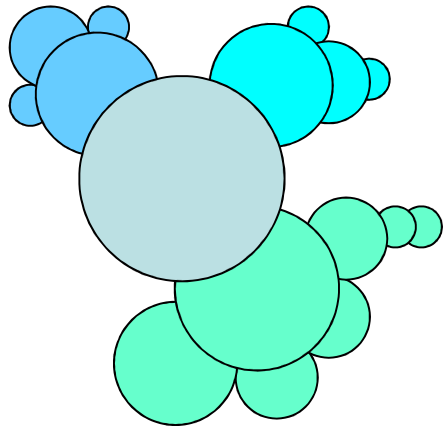
Focus on three questions:

1. How to allocate the tight human resources?
2. How to assess the future importance of existing tasks?
3. How to determine upcoming issues?

Prioritizing is a good first step. Determine which projects will have the highest impact on your department and therefore should be the initial focus of any improvement efforts.

► **Portfolio analysis enables to do all this**

# Portfolio Analysis

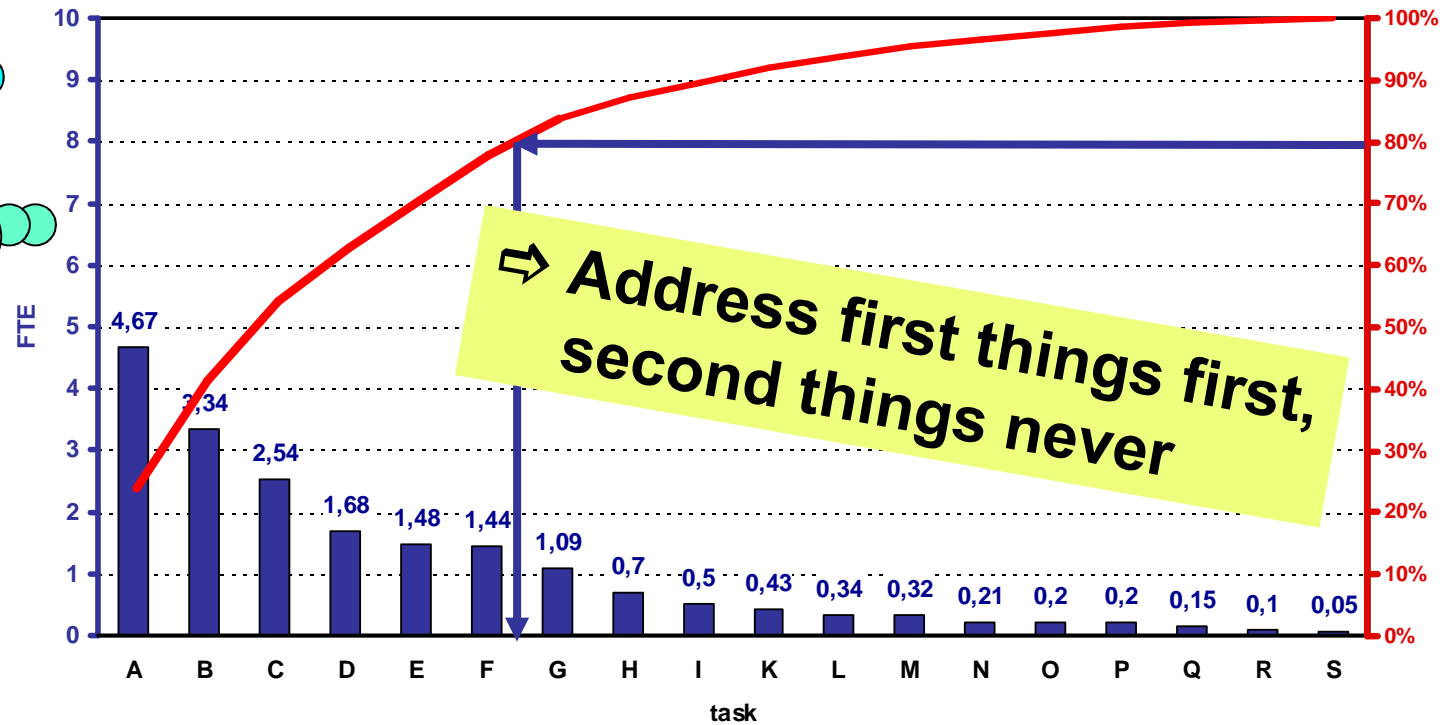
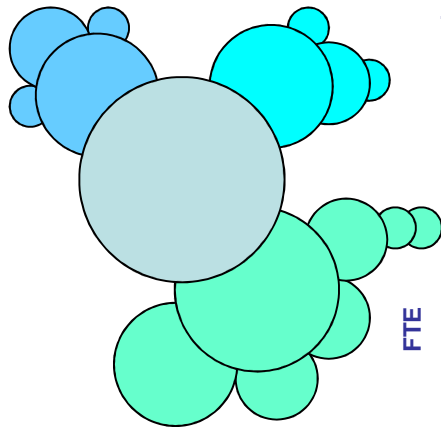


## Procedure:

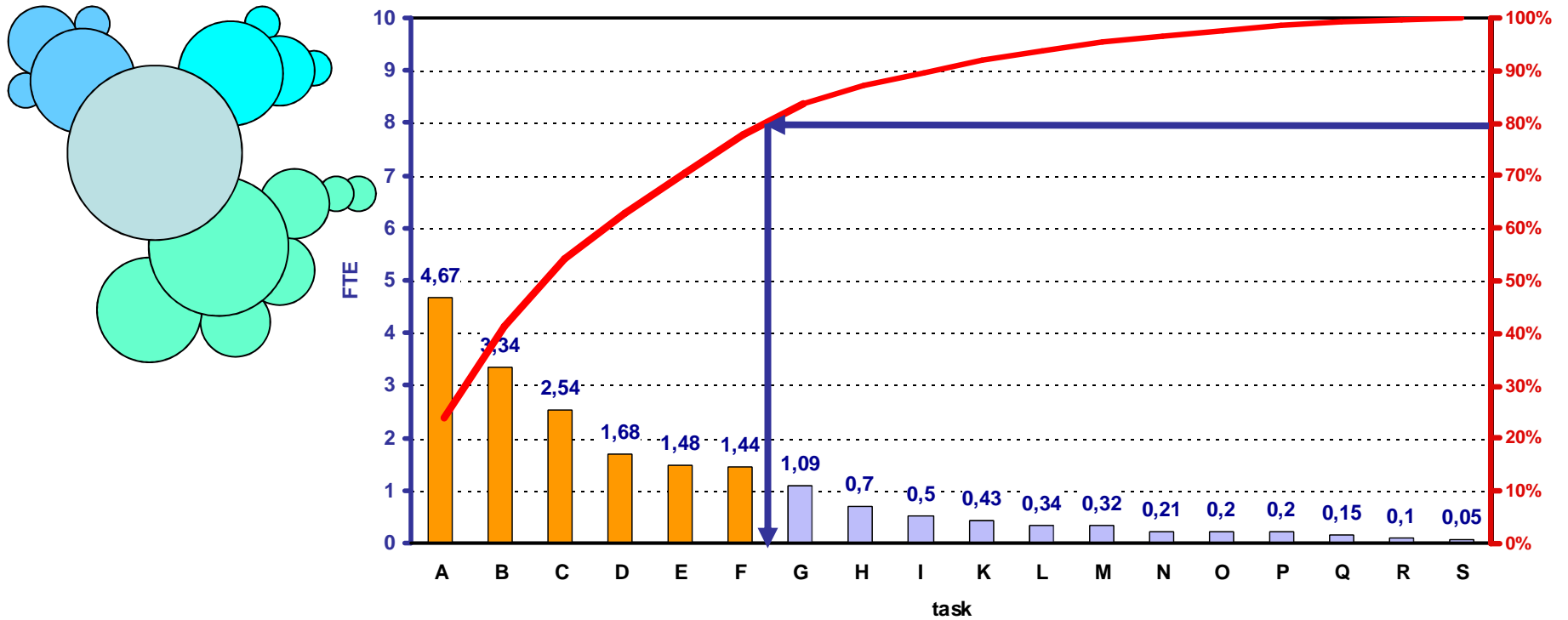
1. Identify scope of tasks
2. Measure (or estimate) expenditure of time (FTE) for each item
3. Form a table listing all the tasks with their corresponding FTE
4. Arrange the rows in the decreasing order of importance
5. Add a cumulative percentage column to the table

► **Plot a Pareto chart**

# Portfolio Analysis - Pareto Chart



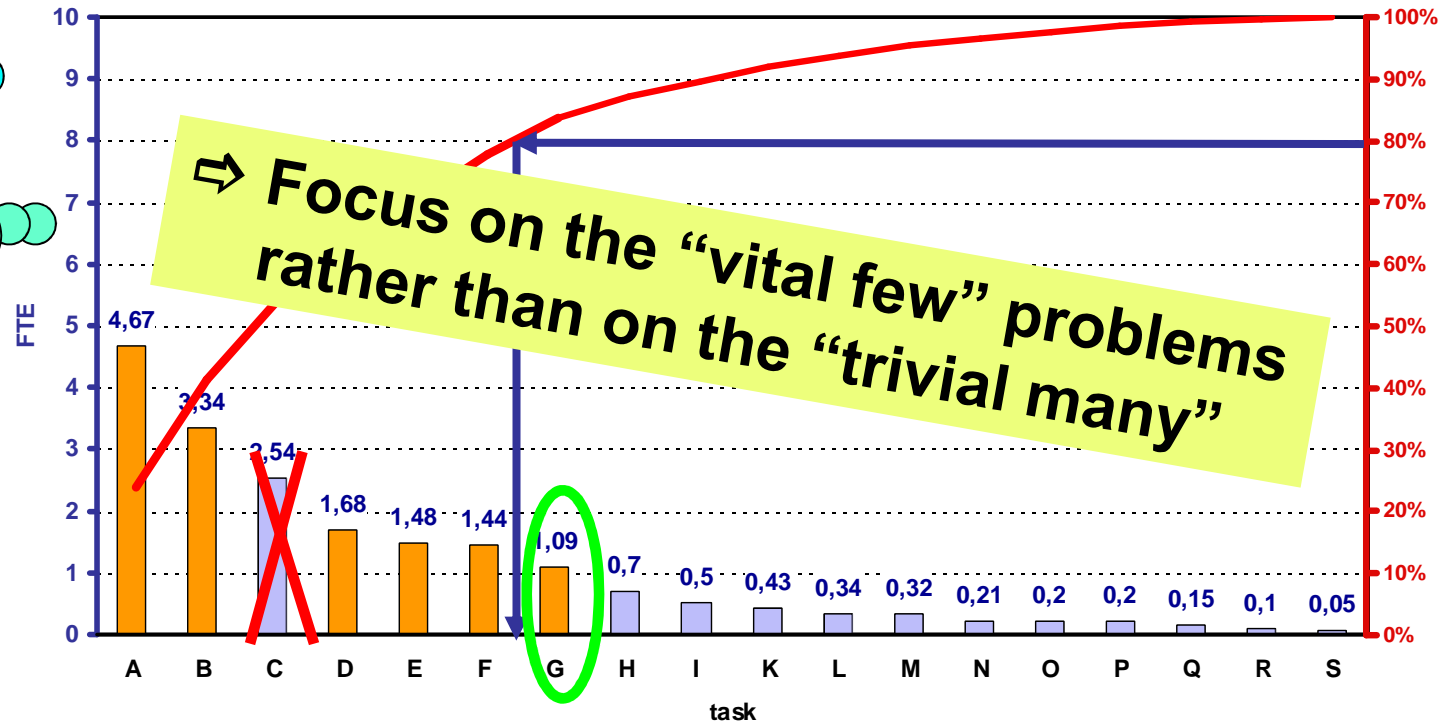
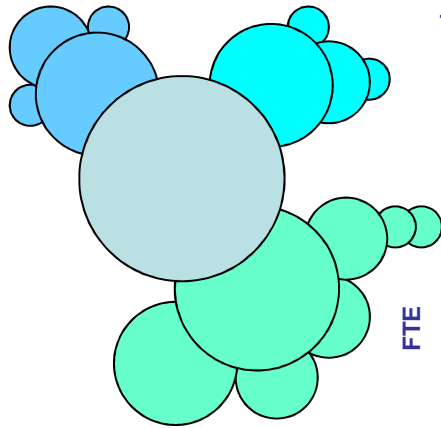
# Portfolio Analysis - Pareto Chart



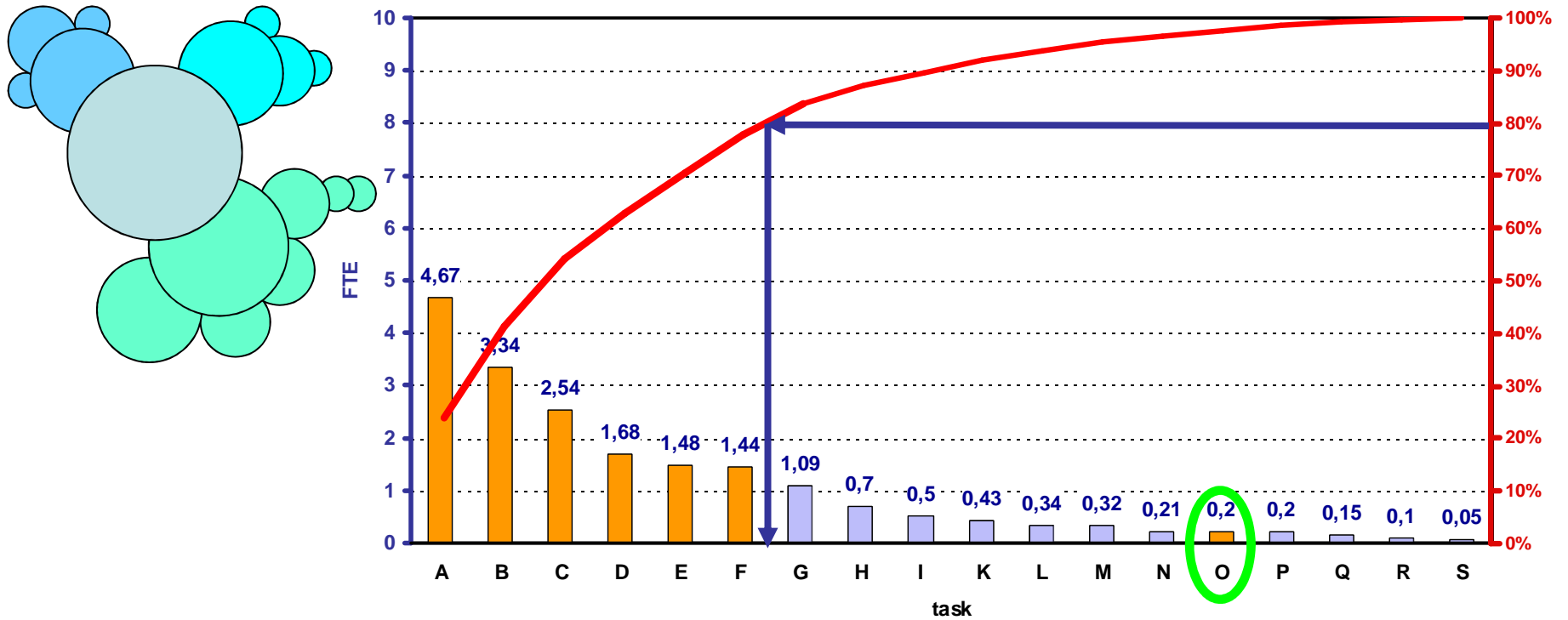
14.03.2010

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# Portfolio Analysis - Pareto Chart



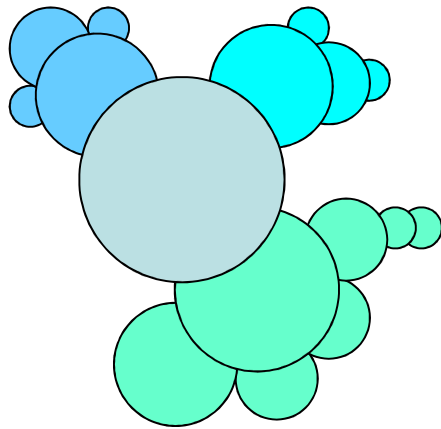
# Portfolio Analysis - Pareto Chart



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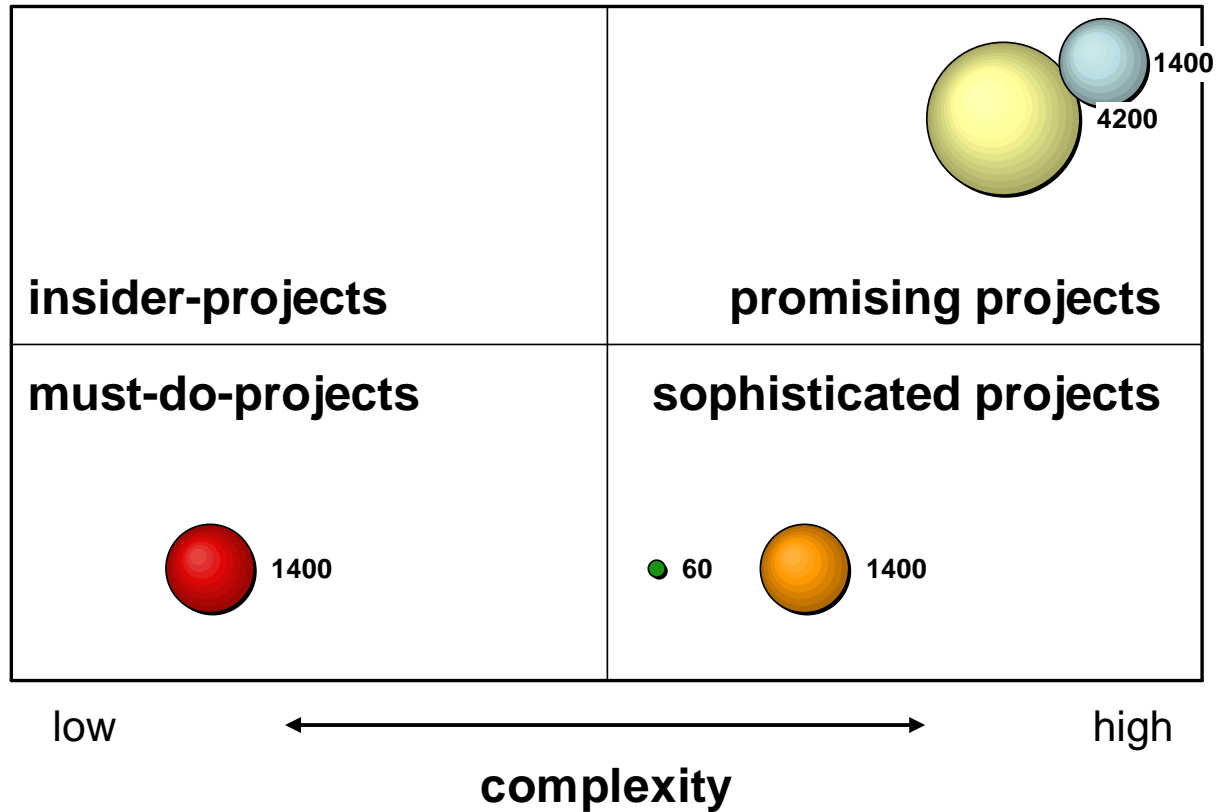
# Portfolio Analysis - Priorisation



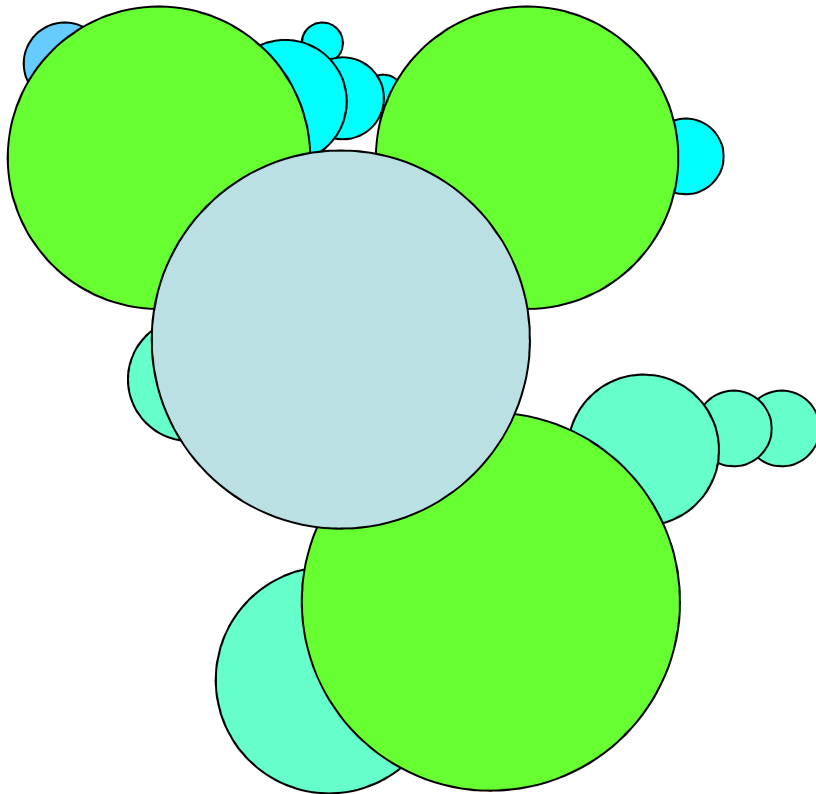
difficulty in implementing

high  
↑  
↓  
low

potential opportunities [mh/yr]



## Basic Intention

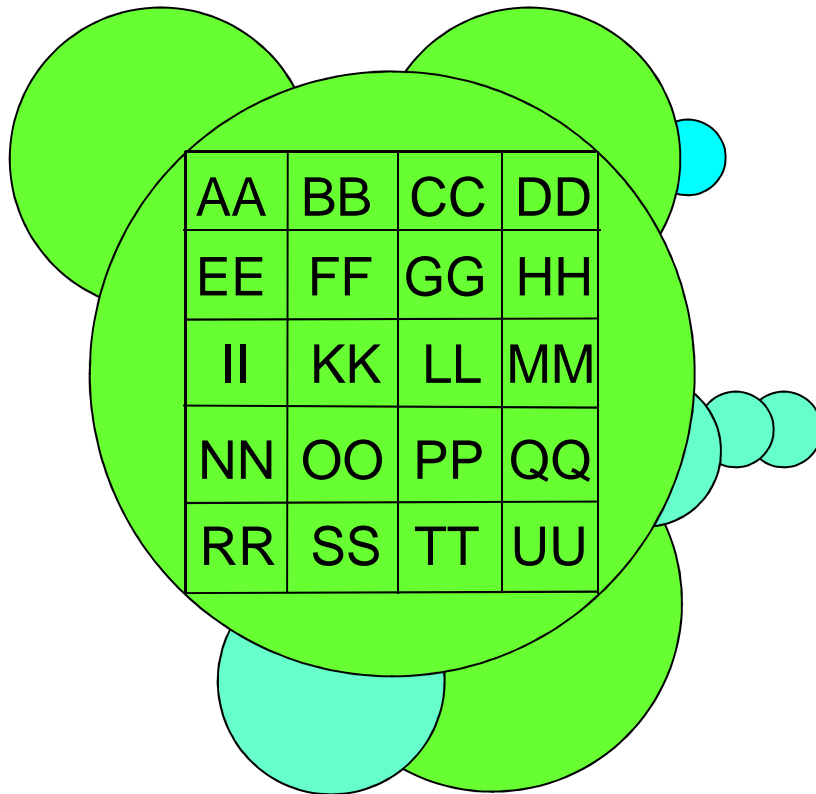


**Personnel resources  
which are currently allocated  
to unprofitable functions  
must be regained for  
fundamental targets.**

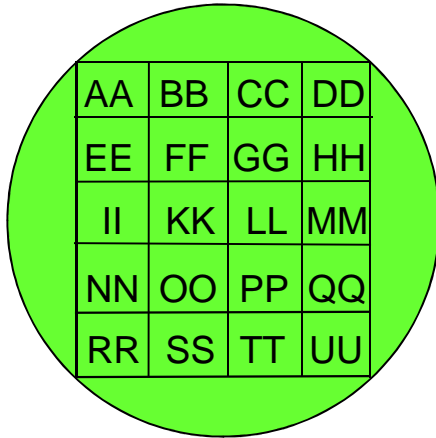
# Driven Quality

Quality refers to the completion of activities to the specific requirements of the firm or the task.

All identified main processes as well as strategic processes in the quality system should be monitored through data collection by appropriate methods, assuring that data are valid, representative, and adequate.



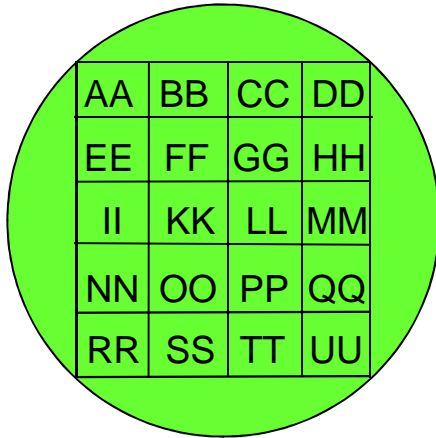
## Example: Nonconformities



Nonconformity refers to a failure to comply with requirements. A requirement is a need, expectation, or obligation. It can be stated or implied by an organization, its customers, or other interested parties.

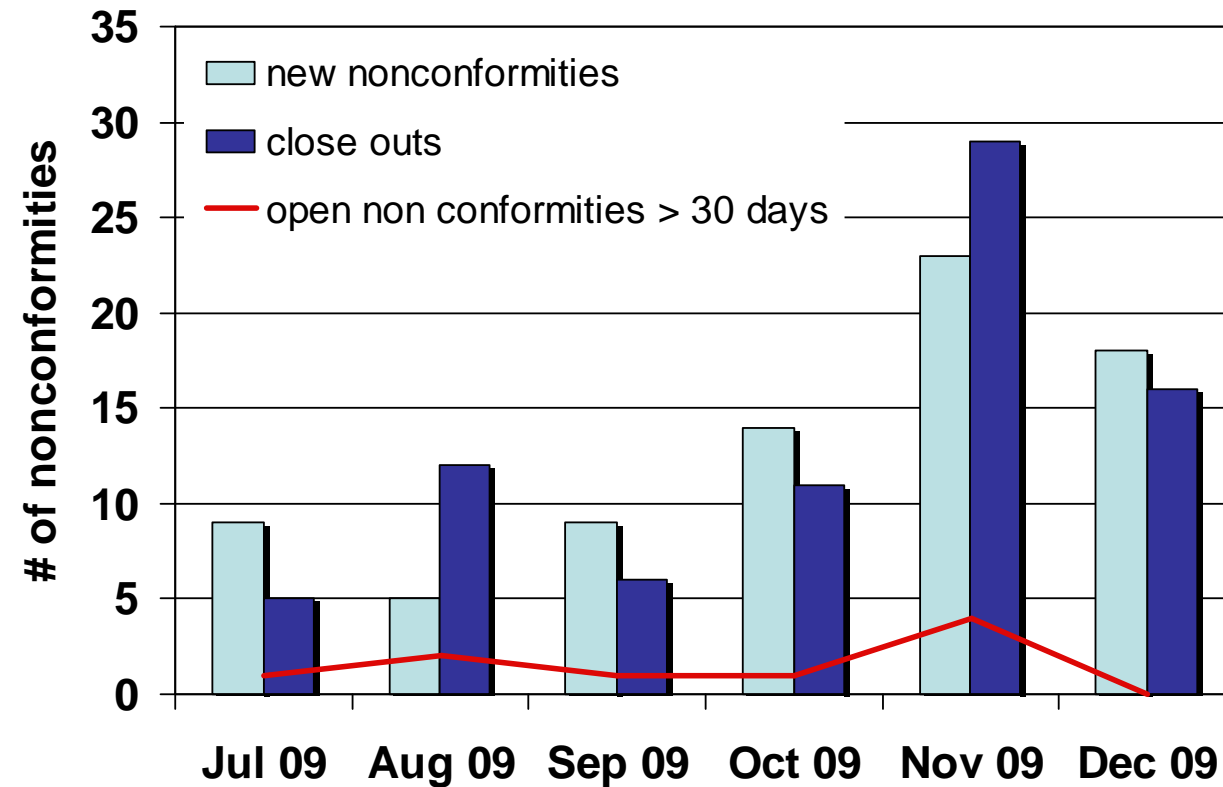
In quality management any deviation from a specification, a standard (process, procedure or protocol), or an expectation should be considered as nonconformity. This encompasses any nonconformities discovered by quality control processes, or by regular audits.

# Example: Nonconformities

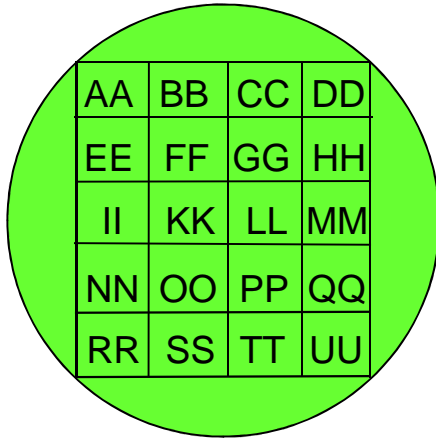


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Nonconformities in the second half year of 2009

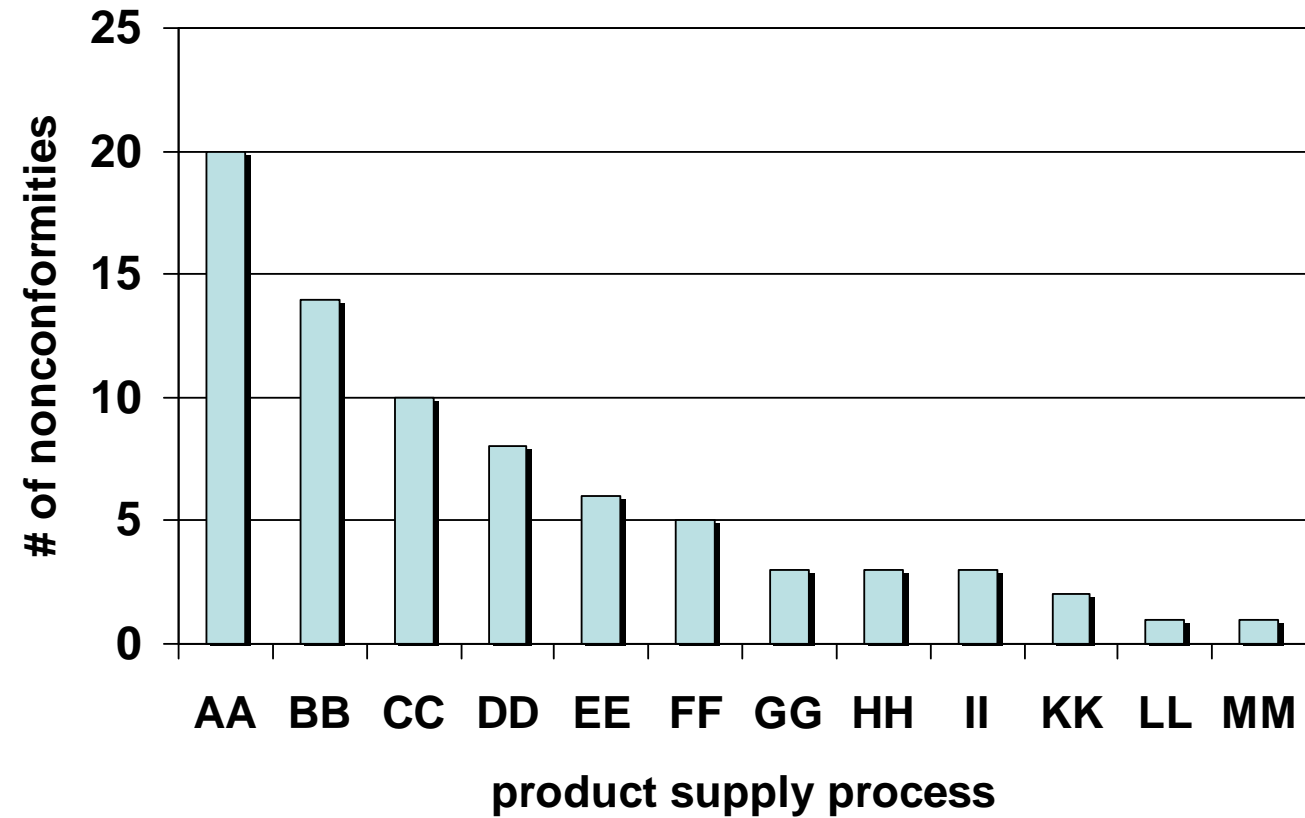


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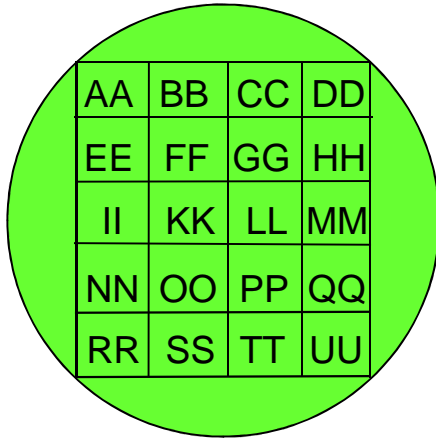


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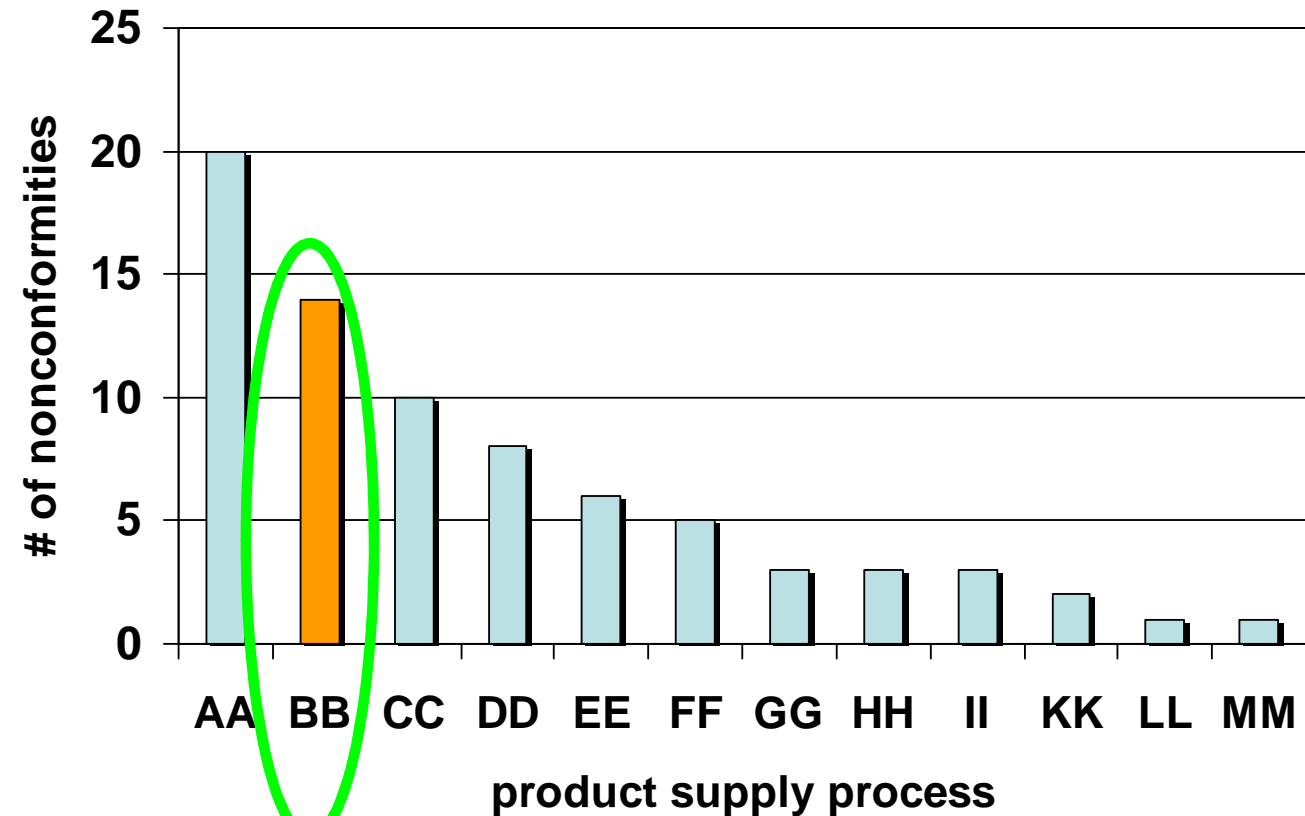


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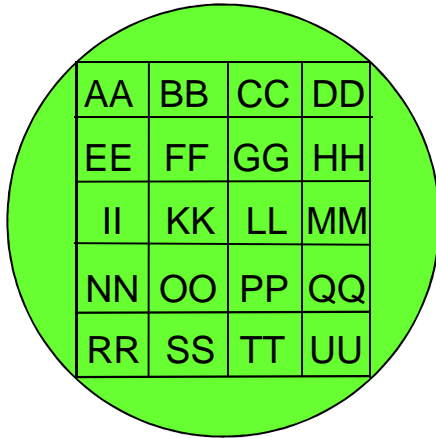


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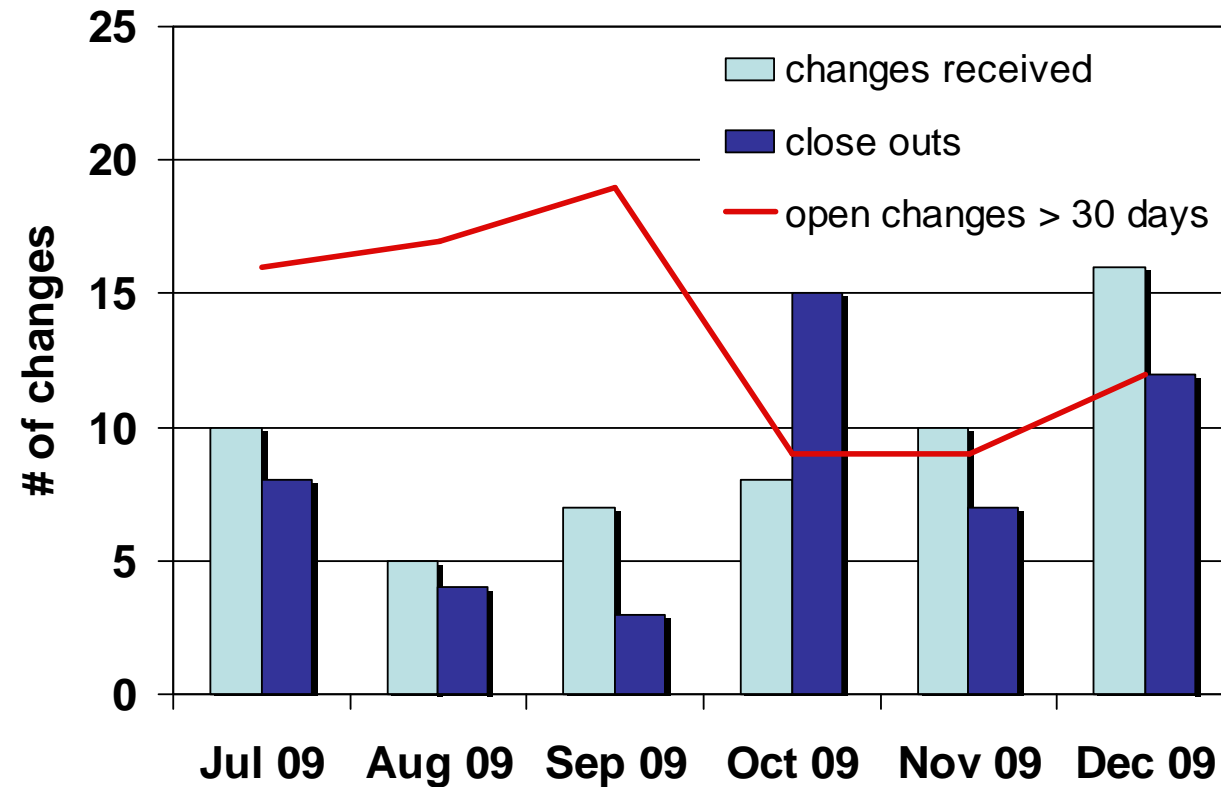


# Example: Change Control

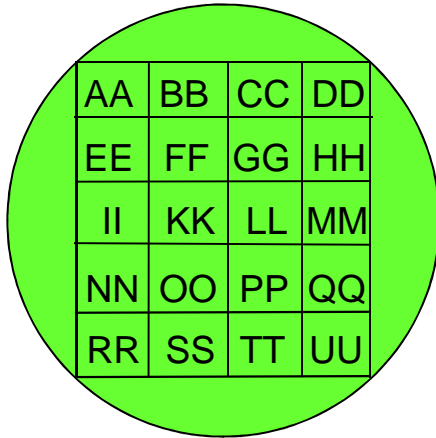


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Changes in the second half year of 2009



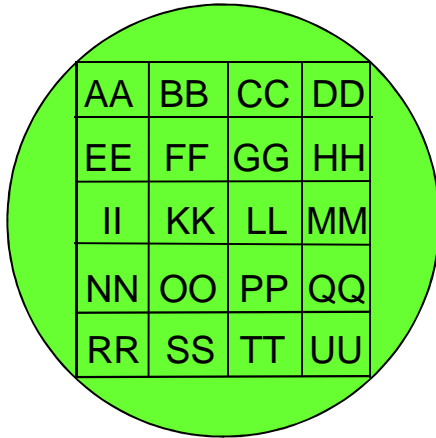
## Response Mode



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An effective quality management should develop a quick response for routine items. Data review and procedural changes should be processed within short time. Routine decisions should be consistent and quickly given without the need for interminable meetings or upper management involvement.

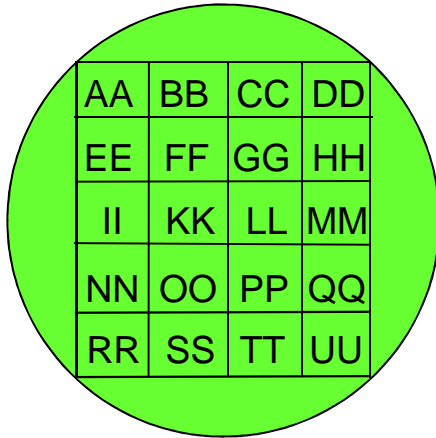
# Process Control



Quality management is also a component of process control in the sense of preventing defects instead of handling problems when they occur. Corrective action is taken to eliminate the cause of a detected nonconformity and to prevent recurrence.

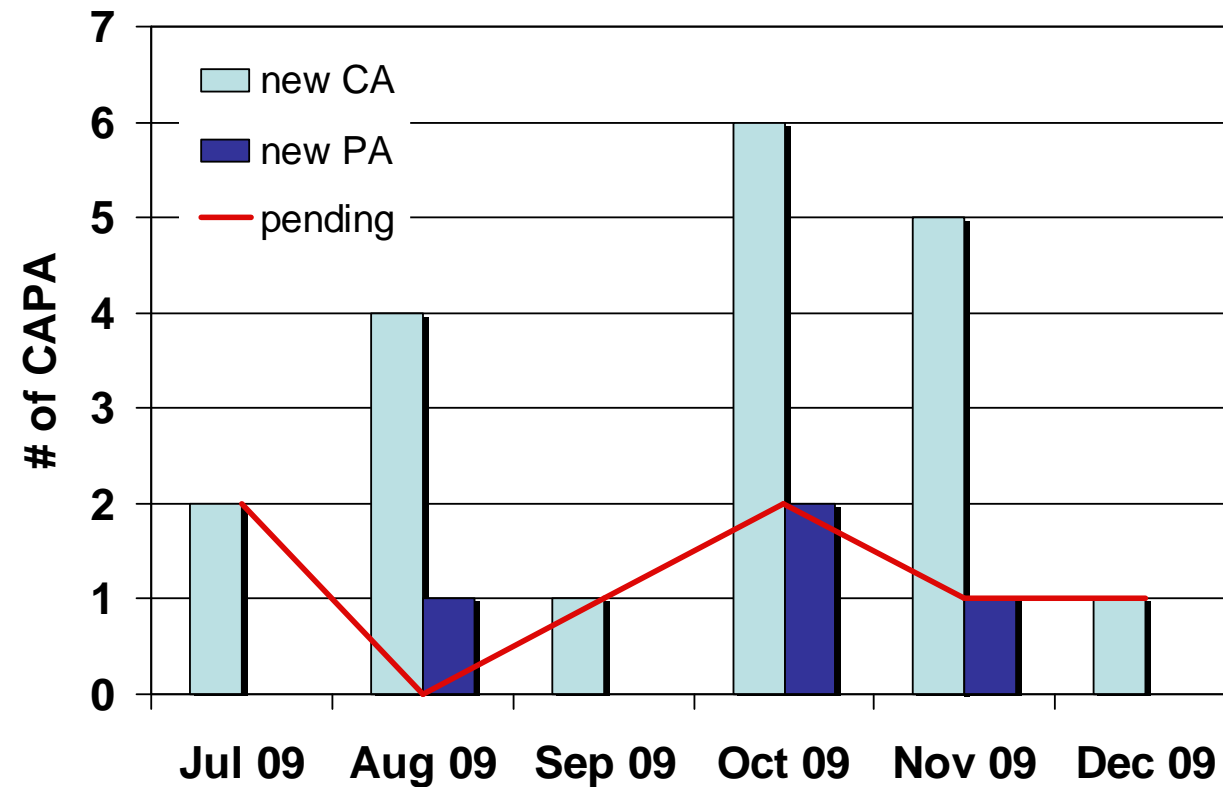
This means that with an improvement in the operations in many cases costs are decreased, more quality requirements are met and finally customer satisfaction is increased.

# Example: Corrective Actions - Preventive Actions

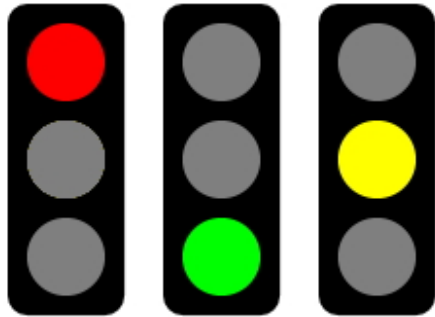


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CAPA in the second half year of 2009



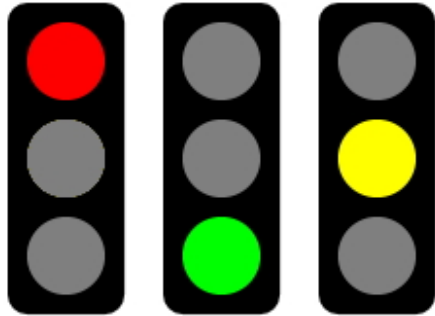
## Management Review



A customer driven organization should develop a feeling for the key drivers of customer satisfaction. For this purpose the quality management should prepare the data and generate at least a quarterly preferably a monthly quality review for the departments involved.

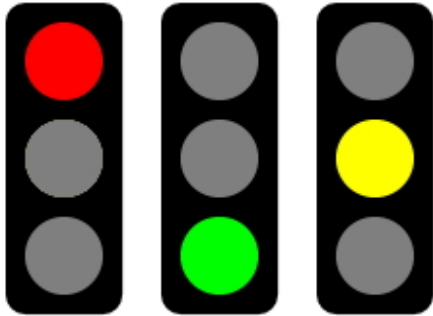
Any review needs a message. Messages however must not only be composed of statements. Messages have to explain, compare and assess the data and have to submit appropriate recommendations to the addressee.

## Management Review



For the annual or semi-annual management review data must be presented in an accessible form so that processes can be evaluated according to objectives, achievements and resources. Focus should be on the identification of all impacts on external relationships at a glance (customers, authorities).

# Management Review



As output from the management review process, there should be evidence of decisions regarding:

- change of quality policy and objectives
- plans and possible actions for improvements
- corrective actions as appropriate
- increased customer satisfaction
- and planning of resource needs.



**Thank you  
for your attention**