



Management systems: Part 1 of 2

(Business) Management Systems: Purpose and benefits

A (business) management system can be (should be?) a means to:

- achieve business objectives
- increase understanding of current operations and the likely impact of change
- communicate knowledge
- demonstrate compliance (with the requirements of the Turnbull report, Sarbanes-Oxley, sector-specific and international standards etc)
- establish “best practice”
- ensure consistency
- set priorities
- change behaviour.

Different Types of “System”

The term “system” has a variety of meanings in different contexts. For example, it is used in relation to the “nervous system” or the “digestive system” – but this usage relies on different concepts from its use in relation to business and the management of an organisation.

Even in a business context, the term “management system” is used in a number of ways, depending on the context and the objective. It can mean:

- a system to manage a particular activity or a specific type of asset - for example, Customer Relationships (CRM), Preventive Maintenance (PMM), Materials (MM)
- the means to manage all relevant areas of operation, often in relation to a specific aspect - for example, quality, environment, information security
- the way in which every aspect of an organisation is managed, ie its “business management system”.

In the first case, a software application is, nowadays, very often intrinsic to how this is managed. This type of management system is not what we are considering here.

In the other cases, the traditional approach has been to address individual aspects separately. There is now a move towards “integrating” management systems, especially when seeking combined certification against more than one external standard, based on an external assessment of a single system description. But the term itself, which suggests that you are taking discrete systems and somehow combining them, can obscure the fundamental principles involved in running a business.

“Integrated management” should be synonymous with (good) “management” – you must manage your operations, resources, staff, impacts, and a myriad of risks which can cause more problems to fix than to avoid.

Definition of a Management System

One definition of management is “*the guidance and control of action*”, and a system is defined as a “*set of components interconnected for a purpose*”. So you could argue that a management system is:

“a set of components, interconnected for the guidance and control of action”.



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This suggests that i) the “interconnection” has been planned, ii) for a reason, and iii) that the purpose would not be achieved without the “interconnection”. In other words, the separate components would not independently achieve the same results.

ISO9000:2000 defines a management system as a

“set of interrelated or interacting elements to establish policy and objectives and to achieve those objectives”.

Expanding on this definition, perhaps the clearest interpretation of this is that a (business) management system is

**“the structure, processes and resources
needed to establish an organisation’s policy and objectives
and to achieve those objectives”.**

This view implies that an organisation has one management system (even if it needs, or chooses, to comply with a number of external standards). PAS99 (see below) uses the following definition:

“A management system comprises the elements of policy, planning, implementation and operation, performance assessment, improvement and management review”.

Although the formulation of strategy and setting of objectives could usefully be added to the start of the list, this definition also emphasises the link between where you want to get to and how you will get there. “Ownership” of the system will by implication lie with those who will be held accountable, ie top management.

Put another way, running an organisation requires objectives and strategy to be defined, processes put in place, resources allocated and risks identified, all of which are the basic building blocks of implementing a business plan. They are also required for successful process improvement [see Elements of corporate strategy].

Different Types of Management Systems

Traditionally, separate management systems were developed to address issues such as quality, environment, health & safety, finance, human resources, information technology and data protection. Other aspects of running an organisation which need to be managed include corporate social responsibility, data security, risk management and business continuity.

Sustainability, reputation management and brand management are given more prominence nowadays, and supply chain management is a subject in its own right, with university courses and chairs now well established. Although there is no universal definition of knowledge management, it too is an area given increasing attention.

Financial management

This is driven by a legal requirement, although an organisation obviously needs to control its available resources. This is an area where a clear division of responsibilities, specific controls and the need for detailed records may be more extensive than for other areas where there may be more subjective decisions allowed and individuals are given more leeway to make their own judgements.

Over the years, computer systems have become more established and sophisticated (accounts and payroll were among the first functions affected), and the automation of many parts of the relevant processes has introduced an automatic control over many of the tasks.

Human resource (HR) management

HR Management would typically involve such processes as recruitment, induction, appraisal and the processing of leavers, but when it is fully integrated into the strategic planning for an



organisation it should perhaps also include succession planning, performance management, shadowing and mentoring.

Unfortunately, many HR departments perform a function which is little more than a recruitment agency with an added responsibility for dealing with terms and conditions and holiday entitlements. A well designed management system should allow Personnel managers to gain a better understanding of actual operations and the demands of a particular role.

Information Technology

The (IT) manager role has moved from being focused on the provision and maintenance of physical hardware and software to include complex communications networks and data management.

In all cases, however, there is a requirement to manage resources and to make them available where they are required to maximum effect, to be aware of developments externally and to decide what is relevant and cost effective for the organisation to adopt.

This can generate “projects” to introduce new technology, which may entail changes to current ways of working which can radically change existing business processes. Even if organisational objectives have not changed, the development and availability of new technology can often enable the objectives to be achieved in different ways, and the significance of technology throughout an organisation needs to be managed in the same way as the involvement of people.

There is, however, an increased risk involved in the use of technology – while it can make specific tasks easier (or even possible), the organisation will become more and more dependent on the technology being available, so that there is a need to build and test contingency plans in case of failure.

Knowledge management (KM)

KM is the way in which an organisation generates value from its intellectual and knowledge-based assets. Generating value from such assets involves codifying what staff, suppliers, partners and customers know, and sharing that information among staff, departments and partner organisations with a view to developing “best practice”.

While knowledge management is often facilitated by IT, technology by itself is not knowledge management. Knowledge management is becoming more important given the impact of an ageing workforce, short term contracts and more career changes over the past few years. The accumulated knowledge about jobs, organisations and market sectors will be lost unless companies take measures to retain it.

“Lessons learned” are few and far between even in industries which recognise that they are not good at doing just that. Outsourcing, especially to other countries, is another trend which has compounded the problem.

All cases

In each of these cases there is a common theme, namely the need to manage a specific factor which may influence the performance of the organisation. This may be something which affects the quality of its output, its consistency of performance or even its ability to operate.

(Description of) a Management System

A common starting point for an organisation when it defines its “management system” has often been to do it in relation to how it complies with the requirements of an external standard - so it would define (for example) a “quality management system”, or an “environmental management system”, based on the structure of the relevant standard, rather than on a logical definition of how the organisation operates.



The resultant multiplicity of systems is now recognised as wasteful and confusing, and there is a welcome recognition that such standards should have a common format. ISO9001:2000 is now being used as the model for a number of other standards, but there is still an unfortunate tendency to use the layout of a standard itself as the starting point for describing and structuring a management system.

It should always be remembered that these standards specify the requirements for a system to enable compliance to be assessed – they do not mandate a particular format for the description of the system.

A more constructive and pragmatic approach is to focus on the organisation's "mission", its stakeholders and their needs, to define how the organisation will satisfy these needs (ie its processes) and to be clear about what it needs to do to ensure that these processes are effective.

[see Specifying, designing and developing processes, products and services and Elements of corporate strategy]

A case might even be made for a management system to be called a "management and operational system", since it describes how things are done as well as how they are managed, whether by the planning and design of processes, the imposition of controls or the allocation of resources. In practice, these two elements are intertwined.

And it is also worth stressing that the "system" exists whether or not it has been defined (in the same way as a process exists even if it has not been described in narrative or flowchart format). Especially in very small organisations, people know what to do (and do it) without having to refer to forms, checklists or written procedures.

When instructions and guidance are written down in a formal system, some people may refer to this description of the system as "the management system". But there is a danger in this – the system description may not reflect actual practice (and in many situations, especially when there are manuals full of unwieldy narrative procedures, this can be the case).

Worse, by referring to the description as "the system", the perceived purpose is changed from being an enabler of results (cause and effect) to a repository of policies and rules for managing the organisation (stagnation).

So even though the term "*management system*" is sometimes (misleadingly) used to mean a "description of how things are done", rather than "how things are (or should be) done", we will concentrate on the latter. (Deming talked of "operational definitions", where there may not be one absolute definition of a term, but it is important that everyone shares a common understanding of what a term means in a given context.)

What the "System" Might Look Like

Given the diversity of organisational type and size, in both the private and public sectors, it is no surprise that there is no "standard" for a management system structure. Any system is, however, likely to have certain key components. For example, PAS 99 identifies the common elements required by management system standards (based on ISO Guide 72 [1] for standards writers) as:

- Policy (formulation)
- Planning
- Implementation and operation
- Performance assessment
- Improvement
- Management review.

A strong case could be made to include:



- Objective setting

as the first item in this list, since the other elements would otherwise lack a point of reference.

Some key objectives of (defining) a management system might be to achieve compliance, to encourage standardisation and reduce variation and to help staff to understand what they have to do and how they fit into the organisation. It should also provide a sound basis for managing change and making improvements.

And the best way to define the system needs to be given due consideration, with the over-riding aim of using a simple, clear and comprehensive approach and format which helps you to focus on the key elements which you need to plan, implement and manage to accomplish your mission.

PDCA

One common approach is to use Deming's management system model of Plan-Do-Check-Act at a higher level than just for issues such as environmental (*e.g.*, ISO 14001) and quality (*e.g.*, ISO 9001) compliance. In summary, the elements are:

Plan: by defining clear objectives (your "mission"), defining your strategy to achieve the objectives, formulating the policies to which you will adhere, and identifying factors that can influence how you will operate.

Do: what you do and how do you do it (plan, get work, do work) / what you need to manage to ensure that these "core" processes are efficient (structure, resources, people etc).

Check: Monitor and measure how you are performing against your plan. Deming preferred "Study" rather than "Check", since it implied a more considered review and assessment of the situation rather than mere reference to selected "facts".

Act: Adjust and refine what you do in the light of the "Check" stage, to achieve improvement.

Process Classification Framework

The Process Classification Framework (PCF) was developed by the American Productivity & Quality Center (APQC) and member companies as an open standard to "facilitate improvement through process management and benchmarking regardless of industry, size, or geography". The PCF organises operating and management processes into 12 enterprise level categories, including process groups and over 1,500 processes and associated activities.

The APQC says that "*Experience shows that the potential of benchmarking to drive dramatic improvement lies squarely in making out-of-the-box comparisons and searching for insights not typically found within intra-industry paradigms. To enable this benchmarking, the PCF serves as a high-level, industry-neutral enterprise model that allows organizations to see their activities from a cross-industry process viewpoint.*"

The model can be useful for an organisation which seeks to ensure that it has considered all aspects of its operation to ensure that it achieves a sustainable business and delivers stakeholder satisfaction.

Sources

Senge, Peter (1990) "The Fifth Discipline" and "The Fifth Discipline Fieldbook" (Doubleday, 1990). (originator of the concepts of "systems thinking" and "the learning organisation")



From the CQI Body of Quality Knowledge 2007-2008: Module 6.4

Publicly Available Specification (PAS 99:2006) BSI (Specification of common management system requirements as a framework for integration)

Institute of Quality Assurance Management Consultants Register (IQA Small Business Standard) (the UK's first quality standard, tailored specifically to SMEs)
(www.iqa.org/downloads/small_business_standard.pdf).

American Productivity & Quality Center (APQC) Founded in 1977, APQC is a member-based non profit organisation serving approximately 500 organizations worldwide in all industries.
(www.apqc.org).

Hoyle, David: ISO 9000 Quality Systems Handbook (Butterworth – Heinmann)

Rummler – Brache (Improving Performance – How to Manage the White Space on the Organisation Chart) (Jossey Bass 1995) (a practical guide to management systems and business process development)

The Open University: Learning Space – Systems thinking and practice
(<http://openlearn.open.ac.uk/mod/resource/view.php?id=183686>)

This is one of four modules written in 2007-2008 by Peter Fraser of MandOS for the Chartered Quality Institute (CQI)'s Body of Quality Knowledge (BoQK). The BoQK (see www.thecqi.org/knowledge) is the framework that defines the current boundaries of knowledge of the quality profession in the UK. It acts as one of the foundations that defines the quality profession and provides the basis for regulation.

The categories of the BoQK are:

- Concepts of quality, its history and development
- Customers, suppliers, other stakeholders and markets
- Interactions of organisations and people
- Technologies and techniques
- Laws, standards, models, associations and professional bodies
- Corporate strategy.

The four modules are:

- **Specifying, Designing and Developing Processes, Products and Services**
- **Management Systems**
- **Elements of Corporate Strategy**
- **Evolution of Quality Thinking Post 1970**