

Hvorfor og hvordan virker standarder for styresyst

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Management by standards - real benefits through fashion

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Abstract

The ISO 9000 series and other management standards have experienced a surprising success. This article is analyzing the possible reasons for this success. Is it because these standards create the benefits they promise or is it just another example of fashion in management? The empirical material for the article consists of two parts: The first part is the actual development of the standards market that is used to give an indication of what the demand-pull is. The second part is the rather large amount of empirical, non-theoretical research about the uses and results of standard based solutions that has accumulated. The article concludes that the benefits cannot be denied or only seen as a result of social construction. But these benefits are perhaps the result of the legitimacy of these management standards, when they were fashionable and the central emphasis placed in the standard system of providing legitimization to a company through external and formal accreditation and certification.

Keywords: Management standards, ISO 9000, legitimization, management theory, effects, management fashion.

The surprising success

ISO 9001, -2 and -3 are the most prominent members of the ISO 9000 series of standards published by the International Organisation for Standardisation. These standards describe requirements to quality management systems. Measured by market penetration, the ISO 9000 series of standards has been a noticeable success. During the past seven years, more than 200,000 companies and organizations around the world have been certified as having a quality management system conforming to ISO 9001, -2 or -3. The ISO 9000 series is also the standard series sold in the highest number of all ISO publications.

The ISO 9000 series has succeeded far beyond its original "home market" of suppliers of physical products to large buyers. Companies where no customer require it, public

organizations serving no individual buyers, schools, hospitals, farmers, trade unions and social institutions have chosen to follow the standard. The success of the ISO 9000 series has prompted several revisions of the standard and a number of new standards and derivatives covering other areas from environmental management over health hazards to ethical conduct. Often the standards are formulating themselves in a manner resembling ISO 9000. Concepts such as "assessors", "audits", "corrective actions", "certification" and even 9000-numbers appear in many new standards. On the other hand, the revisions of the ISO 9000 series have been inspired by some of these other standards.

The success of ISO 9000 and its derivatives is surprising for several reasons.

The broad range of conditions - countries, cultures, industries, market conditions, technologies - under which the ISO 9000 series and the other standards have been used is surprising. It seems to be the case of a "one best way" solution conquering across differences that normally are expected to require different solutions. It denies the whole tradition of contingency theory regarding organizational structure (Burns and Stalker, 1961) (Galbraith, 1977).

Even if the management standards' inherent paradigm of management theory is being modernized these years, it is still out of step with dominant research paradigms in this area. When it is best, the paradigm bases itself on an omnipotent and omniscient management function and a planning idea that is pre-Simon (Simon, 1947), pre-Lindblom (Lindblom, 1965) and pre-March (March and Olsen, 1979). When it is worst, it is basing itself on ideas that intellectually have their roots in Scientific Management pre-Mayo (Mayo, 1933) and pre-Barnard (Barnard, 1938).

Finally, ISO 9000 has not been helped along by some of the mechanisms that is often argued to further fads in management, e.g. first use by very famous companies, presentations in bestsellers of the type of *In Search of Excellence* and *Reengineering the Corporation* (Kieser, 1997) or involvement of known management gurus like Tom Peters (Huczynski, 1993).

The purpose of this article is to discuss the reasons for this surprising success of standard based management. What is it in the concept that makes it so successful? The success of standard based management represents true anomalies in the Kuhnian sense (Kuhn, 1970). It has either to be denied or explained.

Denial seems to have been the main mode up to now. It is remarkable how relatively little the success of standard based management systems has caught the attention of the management research community. It is only now that we see theoretically informed empirical research on these questions (Mouritsen et al. 1999). What we have had up to now is on the one hand a number of empirical studies made by consultants or practical oriented researchers showing benefits. On the other hand, we have had rather highhanded dismissals of standard based systems as expressions of fads or window dressing (Grint, 1997a).

But there is a heavy publication activity in the area. Mainly in the form of books and articles by consultants, standardizing and certifying bodies as well as practical oriented researchers and consultants on the interpretation and benefits of the standards (Such as Sayle, 1991). The many empirical studies consists of three main groups: Surveys based on questionnaires distributed to companies using these standards and sometimes to comparable groups not using the standards, often the subject is the companies' motives for seeking certification and the actual benefits and problems experienced (Such as Skrabec et al. 1997). The second main group consists of statistical analyses of the characteristics and economic performance of certified companies compared to non-certified companies (An example being LRQA, 1996). The third main group of studies are case studies where the experiences of individual companies with the certification process is described (Such as Andersen, 1995).

This whole group of literature seldom explicitly wonders why the management standards have success. Nevertheless, they contain implicitly a number of theories, hypotheses, arguments and suggestions regarding this question. The main understanding is often that companies choose the standards because of some of the many practical benefits that it can and actually does bring.

The arguments regarding benefits can be divided into three groups that also constitute three main groups of explanations of the success of the standards.

Three explanations

The first main group of explanations focuses on the benefits intended and promised by standard senders and promoters of using these standards. In the following text, we refer to these explanations and benefits as the primary. Often these benefits are directly written into the standard text, its names and labels or into introductions. ISO 9001 is, for instance, said to be a standard used to achieve "quality assurance".

These benefits include better quality, quality development and quality assurance (when talking of e.g. ISO 9001), environmental protection and awareness (when talking of e.g. ISO 14001), marketing value and improved market penetration especially in export markets. Another argument in favor of ISO 9000 systems is that they help remove unnecessary (negative) quality costs. Crosby, for instance, argues that "quality is free" meaning that a small investment in a quality management system and in quality training (cost of conformance) can substantially reduce costs of scrap, rework, refunds, management of complaints, lost orders etc. (Crosby, 1979). This line of reasoning is also used to justify standards for environmental protection (Gower, 1996), HRM (Hillage, 1996) and ethical conduct standards (Adams, 1997). The basic idea is that being proactive towards these issues is more efficient than being reactive. Quality management is, according to this reasoning, not only good for the customer. It is beneficial to the company's profitability. Some of these arguments are summarized in Figure 1.

Figure 1 Relations between improved quality and increased profitability (Bergman and Klefsjö, 1991).

The second group of explanations points to a number of positive organizational side effects of using a system standard. In the following text, we refer to these benefits as the secondary benefits and group of explanations. These effects or benefits are seldom mentioned in the standards themselves or in advisory books on how to use the standards but are the central subject of many of the survey and case studies. These benefits covers improved awareness of problems among employees, better team spirit and morale stemming from the employees being part in developing the system. Review and development of the working and productions methods and development of a better management control system are other such benefits. As are their ability to render easier the introduction of new employees and the creation of a common language across diversity in and between organizations. ISO 9000 systems are seen by some to permit a greater degree of decentralization.

The academic literature on management standards has, as we indicated above, ignored most of this research and rather started from the other end of a scale. It dismisses - often without much analysis - most practical benefit of these standards, but point to other less kind explanations of the success of e.g. ISO 9000. In the following text, we refer to this group as the tertiary explanations. Some see ISO 9000 and the other management standards as an expression of fads and fashion (Grint, 1997a). Others as a way to assure the legitimacy of the organization by adapting - at a talking level - to widespread and accepted ideas of correct management (Brunsson and Jacobsson, 1998a). The standards in this way functions more as symbols for efficiency than as actual tools (Røvik, 1998). Explanations pointing to the active push and promotion performed by standard makers, consultants and established interest groups like certification bodies, staff groups etc. also belong in this category. Some of the critics of ISO 9000 argue that ISO 9000 works as a set of blinkers for management (Seddon, 1997). In a dizzying world of management concepts and fads, this may be more of a feature than a bug (Kieser, 1997).

In sum, it is not at all clear why the management standards are so successful. Our intention is to give an answer to the question.

The empirical material for the article consists of two parts:

The first part is the actual development of the standards market. Individual customers sometimes force standards on companies as a condition for buying from them. This was the situation that the ISO 9000 series was originally developed to be used in. But the surprising trend has been that companies and other organizations have freely chosen to submit to standards, including the ISO 9000 series, in situations where customers do not require it, are indifferent to it or not even aware of it. It is this use of standards, including the development

of new standards for this use, that has boomed. It is this part of the standards market that we will describe. It is our assumption that the product development and trends of this market gives an indication of the needs that the standards are fulfilling.

The second part is the rather large amount of empirical non-theoretical research that we referred to above about the uses and results of standard based solutions.

Trends in the "standards market"

The standards concept

The concept "standard" can be used in a broad sense referring to generic concepts and normal ways of thinking, in this case concerning management. In this sense, one can talk about "budgeting" or "Management by Objectives" as standards. However, we use the concept in a narrower sense, requiring the following characteristics to be present:

- The standard is described in an authoritative text published and sanctioned by authoritative bodies, e.g. public standardizing organizations, international non-commercial organizations, trade associations etc.
- The standard uses generic terms that are directed at management and organization in all units of a certain type e.g. all companies or all producers of health related equipment.
- The standard requires that the organization develop some kind of formalized system - e.g. a quality manual, certain roles, institutionalized activities - in order to control the issues mentioned by the standard.
- The standard requires some form of internal and external check or audit.
- The audit or check results in a formal certification, a certificate, mark, logo etc.

It is the use of this narrower type of standardization that has grown remarkably. It is also this type of standardization that is most surprising.

The following standards are included:

- ISO 9001 in its 1987 and 1994 version
- ISO 9001 in its proposed year 2000 version
- ISO 14001
- BS 8800
- Investors in People
- Max Haavelaar.

Standards that fulfill two conditions have been chosen for analysis: 1. They enjoy a high degree of use and popularity. 2. They are largely freely chosen.

There exist a number of standards that fall outside these two criteria. E.g. standards that are necessary (i.e. not freely chosen) if companies wishes to operate on certain markets e.g. the JAR-series of standards for aviation companies, standards for producers of medical equipment, the QS-9000 standard for suppliers to the large American automobile manufactures. And standards like TickIt, SPICE, CMM, Bootstrap that are specialized tools for specific industries - in this case IT.

ISO 9000 standards

The main member of the ISO 9000 family of standards, ISO 9001 was first published in 1987. The purpose of the standard is to assure an individual, commercial customer that an order will be produced and delivered to explicit and agreed specifications. Conventionally, this is termed quality assurance.

The standard sender is the International Organisation for Standardisation (ISO) and national standardizing bodies that have accepted the standard as a national standard. The standard developed out of standards published by British Standards and NATO.

The motives for companies to seek certification are mixed. Originally, e.g. in the UK, it was expected that ISO 9000 certification would become necessary in order to qualify for deliveries to the public sector and in export deliveries. It has not, except for limited areas, turned out that way without this having stopped the growth. A New Zealand study has directly asked companies for the degree of freedom in the choice. 34% of certified companies answered that they had to mainly because customers wanted it. 43% answered that they needed it, for instance to create market credibility and 56% finally indicated that they wanted it for different

reasons (Reasons sum to more than 100% due to multiple responses Wenmoth and Dobbin, 1994).

The central part of the standard consists of 20 requirements to quality management systems. It is required that the company builds and describes such a system. This system should contain procedures for understanding contracts and contract specifications, for purchase from subcontractors, for product development activities, for production processes, for storage and delivery. The company is also required to establish special procedures to handle non-conformances (e.g. products with errors) in order to assure that they are not delivered to customers and that the non-conformance does not occur again. Most of the 20 requirements are directed at the producing level of the organization. Few are directed at administrative systems and at management (they should formulate a quality policy, provide resources for the quality system and review the system). The standard text is relatively short (4.250 words in 320 sentences), abstract and generic (except for a wording mostly referring to production of physical products), leaving the concrete interpretation to the company and its auditors.

The conformance between the described system and actual behavior is checked by internal and external audits. When external audits are performed by the customer, they are referred to as second party audit. When performed by a professional organization accredited to do such audits, e.g. British Standards, Bureau Veritas, they are termed third party audits. Passing such an audit permits the company to be registered or certified to the chosen standard and it can use certain logos to show this to the outside world.

The management philosophy implied is traditional: Planning, job descriptions, record keeping, checking, but with some semi-modern elements like policy formulation, measurable goals, management review, training, prevention and the mentioned internal and external audits leading to a formal certification or certification.

In 1994, the first revision of the standard was made. Today, the standard organizations are working on the year 2000 version of the standard. Some of the changes being proposed are as follows (ISO/TC 176, 1998):

Less emphasis is placed on delivering to the individual customer's manifest order, as his or her "needs" are now also to be considered. The standard has also evolved more in the direction of a management system that assures satisfactory delivery to all, including future customers. As part of this, customers' satisfaction should be measured, and the company should - in TQM fashion - demonstrate continuous improvement.

There is also a change of emphasis from detailed requirements directed at the production level activities and to more general requirements directed at management. The section on management's role has more than doubled its share of the text and the number of references to "management" and other words with "manage" in the text as a whole has quadrupled. The official subject of the standard is changed from "quality system" to "quality management

system". Regarding the management philosophy, the traditional tools are toned down and semi-modern elements are upgraded. The proposed text talks about "top management" that shall create "an environment for awareness and fulfillment of customer requirements" and that "(a) customer-focus when managing processes is an integral part of management responsibility". These new and broad ranging terms are not clearly defined.

As part of the strengthening of the management focus, it is required that management, besides formulation of a quality policy, is setting operational goals. The 20 requirement elements previously listed rather randomly are re-listed in 4 chapters: Quality Management System Requirements, Management Responsibility, Management of Processes, and Measurement, Analysis and Improvement. This new structure is argued to be "more generic than the current 20-element structure and adopts the process management approach widely used in business today. Also the new process-based structure is consistent with the Plan-Do-Check-Act improvement cycle..." (p. 4). The PDCA-cycle - planning and goal setting precedes action which is followed by evaluation (check) and adjustment is a traditional and rational management, that in this context often is credited to Deming (Walton and Deming, 1989).

Environmental Management - ISO 14001

ISO 14001 is a standard for environmental "management" systems (up to the present proposal for revision, ISO 9001 was only called a standard for "quality systems"). It is replacing the BS 7750 standard, which was the first English standard in this area. ISO 14001 was approved by the International Organisation for Standardisation in 1996.

The focus of this standard is different from that of ISO 9001: It is not to satisfy one customer, but the interests of many groups - stakeholders - around a company and society as a whole in matters relating to the external environment. It has, as far as the authors know, not achieved mandatory status to codify requirements from e.g. local or national governments. But is used, and that to a growing degree, freely.

The standard is a little shorter than the ISO 9001 standard and therefore also more abstract. Calibration, for instance, which covers half a page even in the proposed revision of the ISO 9001, is here described in one sentence. Often it is done quite elegantly. Otherwise, the standard resembles the proposed revision of the ISO 9001 standard described above, partly because the revision of the ISO 9001 has been inspired by the ISO 14001 standard. All of the general techniques of ISO 9001 are used: Policy formulation, goals, management review, PDCA-loop, manual, description of authority and responsibility, checks, corrective and preventive actions, training, internal and external audits. Beyond that, there is a requirement to make an overview - the beginning of an "environmental balance sheet" - of the environmental impact of the company. As an extra control, it is required that the environmental policy of the company should be made available to the public. It is also required that the company responds to relevant communication from external interested parties.

The internal environment - BS 8800

ISO 14001 presents us with a set of requirements in relation to the company's external environment. Can we expect a standard concerning the management of the internal environment? Presently, such a standard does not exist. However, the English "Guide to Occupational Health and Safety Management Systems" - BS 8800 - is a step in the direction of an internal environmental standard. It has no mandatory status.

The guideline describes two sets of requirements, both of which lead to the fulfillment of the aims of the guideline. The one is a set of requirements for companies that already have or are in the process of building up their "OH&S" management system according to the HS(G)65 document of the English Department of Health. The other set of requirements is parallel to ISO 14001 - the above-mentioned environmental standard.

The requirements in the part based on ISO 14001 are structured by the PDCA-loop as it is implemented in the ISO 14001 standard. The structure most likely foreshadows what we will encounter in newer management system standards:

The first step required is to draw up a "balance sheet" regarding the health and safety issues. For instance, where are we now when it comes to health and security, legal requirements, best practices, etc. in relation to the requirements in the guide?

The next step is to formulate a policy for the area. In the original ISO 9001 text, this were formulated in four lines. In the ISO 14001, there are 6 sub-requirements and 16 lines of text in the requirement itself. In the OH&S guideline, the requirement itself consists of 9 sub-requirements and a total of 26 lines of text.

The next steps are planning and implementation. System documentation - a manual - is required, but not as detailed as in ISO 9000. The final steps are evaluation and corrective actions.

Investors in People National Standard

Investors in People (IIP) is an independent unit under the English Ministry of Education and Unemployment. It has published a standard for good personnel policy. A company that lives up to the standard's requirements can call itself an "Investor in People company". In 1996, more than 20,000 UK organizations were committed to achieving this (IIP, 1996).

IIP works differently than the ISO 9000 standard. The compliance with the standard is controlled by structured self-evaluations and by the public. In order for the public to be able to control that the standard is followed, the IIP companies have to publish their personnel and training policies. In other words, the IIP is based upon trust in the fact that the companies will do what they say they intend to and upon a possibility for public pressure.

The structure of the IIP standard equals that of the described PDCA-loop. Only, it has a mere four elements/principles: Commitment, planning, action and evaluation. Under the headings of these four main principles, IIP companies are committed to observe 23 requirements.

Global ethics

In an entirely different area, there is a clear growth in standards from private standard senders. Currently, many international Non Governmental Organizations work to standardize requirements for goods coming from third world countries.

Examples of goods covered by these attempts at creating standards are:

- Coffee and tea
- Exotic woods

The Max Havelaar Foundation is working to assure that the tea and coffee we drink are produced and traded under reasonable social conditions. The Foundation requires that the coffee-roaster purchases the coffee beans at the UN minimum price. In addition, they require that the coffee-roasting companies only trade with farmers who are organized in co-operatives so as to improve the negotiating position of farmers. The farmers should grow other crops than coffee beans in order to prevent them from catastrophic consequences, should the coffee harvest fail. To enable the customers to distinguish ordinarily produced and traded coffee from the coffee produced and traded under supervision of the Max Havelaar Foundation, Max Havelaar is now also a brand name for coffee. The producers, the industry and the consumers have received the brand positively.

As for the production of exotic woods, the cutting down of the jungle in the Amazons has long been the focus of attention. A number of global NGO's such as Greenpeace and Friends of the Earth have put forward a suggestion on how to brand wood products produced in accordance with sustainable development. The brand is called FSC - Forest Stewardship Council.

Other ideas for standards or brands based on standards have been suggested, but not materialized. Among these are standards for human rights, including the avoidance of trading with Third World countries engaged in child labor and with western companies that cooperate with these companies or have subsidiaries engaged in child labor.

Most likely, these examples are only the beginning of a trend whereby companies document their social consciousness, at home and globally. An indicator of this trend is the development of a more encompassing standard for companies' social responsibility being developed in England under the name SA 8800. The Danish Minister of Economic affairs has also suggested the development of a standard of that sort in Denmark.

Trends of the standards market

We can now sum up some of the trends noted in the previous section:

There is a growth in the areas and problems approached with the standard tool: Environmental problems, personnel relations, health hazards, global ethics, and social responsibility. All issues with a high degree of popularity in the public discourse. Standards seem to be a victorious social technology that spreads to new areas.

There is a growth in the number of standard senders/sources: Standardizing bodies, trade associations, non-governmental organizations, and private companies are active.

The requirements of the standards have been undergoing a change over the years as exemplified by the development of the ISO 9000 series. In the first stage of development, the requirements focused on control and inspection processes. These inspections were to take place before, during and after production. Gradually, the focus has shifted to work processes and processes that should prevent (re)occurrence of problems (audit and preventive and corrective actions). The most recent development is that focus shifts to management processes. At the same time requirements regarding work processes and especially control and inspection processes have been reduced in numbers and detail.

The management paradigm implied in the requirements directed at management is also undergoing change. From a rudimentary role of formulating policies, approving the distribution of authority and responsibility and assigning resources, management has changed into a strong, goal setting, planning, training, result and customer aware function. The management paradigm has been modernized and is most likely conformant with modern management discourse.

Even if the requirements directed at management and management processes have increased, they have not become more concrete. Rather, they have developed into rather loose statements about the PDCA-cycle and customer satisfaction that require a large amount of interpretation.

Existing explanations of the success of standards

Primary benefits: Better quality, increased market share, better economic results

The first main group of explanations of the success of standard based management described earlier focuses on the benefits intended and promised by standard senders and promoters of using these standards. These benefits center around increased quality (in the case of ISO 9000) and a better market position based on living up to customers' demands. If such benefits are indeed realized, it may well explain the success of the system standards.

There exists a rather impressive number of studies on companies' motives and expectations as well as actual results of ISO 9000 certification. This is in itself noticeable. Many management concepts and fads are sold on a basis of anecdotes and more or less personal experiences of the author (Røvik, 1998; Furusten, 1992).

Regarding the motives and expectations, a study of over 500 US based companies having ISO 9000 certified systems (Ebrahimpour et al. 1997) shows that increasing market share is the highest rated reason for achieving ISO 9000 certification. A high degree of improvement in product design, process design, product quality, communication, and supplier relations were other reasons for seeking ISO 9000 certification. A study of 40 certified companies in Colorado, USA (Weston, 1995) showed customer and marketing considerations to be the most important reasons for seeking ISO 9000 certification, followed by need to improve processes, and a desire for global deployment of products. In a study undertaken by the Manchester Business School of 1,190 UK companies with a ISO certification (SGS Yarsley, 1995), the most commonly mentioned reasons for seeking certification were future customers' demand for ISO 9000, increase in consistency of operations, the maintenance/improvement of market shares, improvement of service quality and customer pressure. An Australian study of 160 ISO certified companies (Brown and van der Wiele, 1995) shows maintaining/increasing market share as the top scoring reason for seeking certification followed by improving efficiency, to be considered for tenders, improving customer services, gaining marketing benefits as the following reasons.

But how far does actual experiences live up to expectations? Generally, quite well. Those of the mentioned studies that have also asked for evaluation of results show positive correlation between actual experiences and expectations. The Australian study reports of improved quality awareness, improved customer service, improved product and service quality and increased customer satisfaction among the eight top scoring issues mentioned by the companies. In the Manchester Business School study, improving customer service, keeping customers, increasing customer satisfaction and improving market shares are among the top 10 benefits reported on by approximately 50-80% of the sample. Other studies reach the same conclusions. "These

results seem to indicate that the actual benefits realized from ISO certification are consistent with the top reasons for pursuing it - a quality base" (Skrabec et al. 1997p. 26). "These interviews show that organizations embark on the certification route largely in response to real or anticipated external needs. In the majority of cases these needs have been met" (LRQA, 1996 Introduction).

Positive results are not only found in studies based on self-reporting - as the cited survey studies. Studies of economic performance of the certified companies also show positive results. A study undertaken by Surrey University for Lloyd's Register Quality Assurance (LRQA) of over 200 British mechanical engineering and manufacturing companies concludes: "The research shows that firms registered to ISO 9000 by LRQA significantly out-performed their competitors across all the main business ratios from profitability to return on capital employed" (LRQA, 1996p. 1). The Manchester Business study reports a 20% growth in sales for the ISO 9000 sample compared to a national average of 7%. A Danish study of 644 ISO certified companies (Häversjö, 1997) shows a substantial better economic performance of certified companies compared to similar non-certified companies. Performance was better prior to certification, but results were declining. The decline took off after certification. On average, the certified companies experienced a larger growth in sales than the comparison group.

The positive influence on quality cost - "quality is free" - is also documented in research. In a survey of US textile mills it is reported that scrap and rework as well as customer returns decreased for companies that were certified, even if only for a period of time (Adanur and Allen, 1995). A survey of the results of ISO 9000 in UK (Buttle, 1996) reach the same conclusion.

The reading of study after study showing the same positive effects is rather boring. But the rather solid evidence of consistent positive effects is quite surprising. Both, as argued above, by creating a more solid basis for claims of success for standards than for most management fads and seen from the perspective of organizational studies that argue that proposals for organizational reforms are consistently not fulfilling their promises. Brunsson, for instance, has argued (1990) that reform propositions are consistently more convincing than actual results. This does not seem to be the case with ISO 9000 - and by extension the other standards - which deliver, or at least can deliver.

This does not mean, however, that the research is beyond criticism.

First of all, practically no studies "objectively" demonstrate a connection between use of system standards, e.g. ISO 9001, and quality, either in the form of reduced non-conformances or in the form of development of better products over time. No test has been made of the quality level of products in a specific industry and no correlation has been proven between these quality levels and the use or non-use of system standards in the producing companies. What we have are proxies. We have companies reporting "that ISO did help in producing better quality products overall" (Adanur and Allen, 1995 p. 47) or that it "improved customer service" (SGS Yarsley, 1995p. 6). Others report that certification creates improvement in "quality awareness" among employees (Skrabec et al. 1997).

The reports of sales and market share advantages vary curiously from study to study. Skrabec et al. (1997) report: "Reasons such as exporting and market competition appear to be less critical as a second generation of ISO-registered companies emerge." The actual benefits reported in the study and a companion study are also meager: "The results clearly suggest that increasing market share is not - at least in the short term - achievable benefit of ISO certification."

Methodologically, some of the research can be criticized. Often the surveys are based on surprisingly low response rates without any discussion of the implication of this. Ebrahimpour's US study achieved a response rate of 36,8% (Ebrahimpour et al. 1997p. 570). Manchester Business School only achieved a response rate of 28% (SGS Yarsley, 1995p. 1). Two Australian studies achieved a response rate of 32% (Brown and van der Wiele, 1995 p. 9) and 18% (Brown and van der Wiele, 1996 p. 295). A more recent UK study had a response rate of 15% (Skrabec et al. 1997).

Reports or discussions on who filled out the questionnaires are rare. Most likely, the people responsible for the ISO certification and system filled them out. In a comparable survey performed by the Technical Committee responsible for developing the standards, 56% of the company responses were given by the quality managers and another 6% by quality consultants (ISO/TC 176, 1998). One might ask oneself what the consequences are of letting those whose' job depend on the results evaluate the results?

Finally, the studies that make use of statistical data do not sufficiently answer the eternal question of cause and effect. Even when using control groups of companies of the same size and industry, it is difficult to ensure that the companies that select ISO 9000 certification, especially at the early stages (1991 in the case of the Manchester School Study - (SGS Yarsley, 1995)) are not in others ways different, e.g. more ready to try new methods, more daring, with better management etc. Häversjö's research (1997) could be interpreted in this direction: the ISO certified companies studied show better economic performance after certification, but they also had a better economic performance before certification.

In relation to this group of explanations, the development in the standards market is interesting. If the realization of the intended and promised benefits was the main driving force underlying development in the standard market, one could hypothesize that there would be an increase in the standards' focus on primary benefits and in the requirements directed at these primary effects.

That does not, as we have seen, seem to be the case. Most of the newly developed standards also focuses on aspects - environment, health, information security, ethics - that have less to do with serving the individual customer and more to do with serving society, the common good or public opinion.

Thus, illustrated by the development in the standards market, the main benefit gained by companies that use standards does not lie with what we have here called the benefits intended and promised by standard senders and promoters of using these standards. This leads us to the next group of effects.

Secondary benefits: Organizational "side" effects

When benefits are compared to expectations, many of the surveys show a systematic pattern:

"Overall, 99% of businesses claimed that they had experienced some benefit from certification. The two most important benefits of ISO 9000 were internal, despite the fact that most organizations focused on external reasons when asked why they sought the standard in the first place. Better management control was seen as the most important benefit overall, followed by the linked advantage of improving awareness and elimination of procedural problems. Other "internal" factors in the top ten included improving efficiency and aiding induction of new staff" (SGS Yarsley, 1995 p. 6).

"One of the study's most significant findings revealed that the internal benefits of operation a Quality Management System (QMS) assessed to ISO 9000 are greater than its external benefits" (LRQA, 1996 p. 2).

Among the most important benefits in most effect studies one finds organizational and management benefits. Other studies indicate the top three scoring benefits to be: "Improved quality awareness", "improved awareness of problems", and "improved management control" (Brown and van der Wiele, 1995). "Improving efficiency", "Improving awareness of procedural problems", "better management control" (Buttle, 1997). "Better team spirit", "increased efficiency" and "fewer staff conflicts" (Lee, 1995).

An often mentioned side benefit concerns a better employee morale stemming from the participation of employees in the development of the system. This argument is clearly presented in a study of the implementation of an ISO 9000 system at Siemens in the US. The study showed that the employees' positive experience of participating in the process was considered the main benefit (Czuchry et al. 1997). Another benefit which is often mentioned is that a certification often gives occasion to review the working and production methods (Doherty, 1995).

Several cases described in the literature show that such organizational effects are not merely accidental. ISO 9000 or the other standards may have been chosen not for their "primary" effects but for some technical/organizational feature that was not on the original standard maker's mind. Here are some of such functions:

A description of the use of ISO 9002 in the English Sandwell College points to several interesting organizational benefits of the system: The quality system represents a "set of unifying structures that have led to a greater sense of collegiality across our campuses and disciplines" (MacRobert, 1995 p. 52). The system seems to have helped solve a central problem to educational institutions, namely their diversity and atomization. ISO 9000 gave them a common language across this diversity.

The description also proved ISO 9002 to be a method of "devolving, where appropriate, power and responsibility down to program team level, while at the same time retaining central strategic management" (p. 52). ISO 9000 can thus be seen as a method of implementing decentralization and self-management at a lower level of the organization. Others have pointed out that ISO 9000 - as one of the few popular management ideas of today - installs self-management systems at a lower level of the organization (Callan, 1992).

Manpower, whose main business is to provide temporary workers, pointed to a number of organizational benefits upon achievement of ISO 9000 certification: "... gives the company even more confidence in the strength of its network of offices and the consistency of service in those offices ... (it also) ensures that the company defines each employee's role and responsibilities in delivering quality service. This clarity and sense of identity, they say, enhance team spirit and pride" (Andersen, 1995).

Some studies show both internal and external organizational benefits. In a study of effects following certification to BS 7750 (a forerunner to ISO 14001) in 11 firms, Mouritsen et al. (1999) identified four ideal typical classes of benefits and strategies for use. The first strategic use of certification is to appease the environment. Before certification one of the companies in the study was subject to focused criticism and a public investigation but this ceased after certification. The second strategy was to use the certification process to develop new production methods. The third strategy was to use it as a marketing platform, and the fourth strategy was to use the standard to mobilize knowledge not only internally but also from external partners.

Similar unorthodox ways of using the standards were discovered in a study of the ISO 9002 certification in a home for multi-handicapped, Ebo (Häversjö and Larsen, 1999). Ebo was the first institution of its type to achieve certification. The manager of the institution strived through the process to give a signal to the outer world that such institutions could be as professional and quality aware as any commercial company. He also wanted to signal to his own profession that things can be done differently and better. Finally, he found it a good way to reinvigorate professional values like collegial supervision, fact based analysis, and placing the client's interest at center stage.

Two conclusions can be made based on this survey of studies: 1) The main effects of ISO 9000 - and perhaps other standards - are not related to product quality and sales, but are organizational "side" benefits, internally or externally. Thus, the standards seem to be used as

a management tool within the companies rather than by external parties - e.g. customers, authorities – as a means of controlling the company. 2) The studied standards can be claimed to foster a very wide range of organizational effects going from achieving decentralization to creating arguments in the internal dialogue of a profession.

Both conclusions are, as we have indicated, compatible with the developments in the standards market. The trend away from requirements directed at the products and the production process to requirements directed at organization and management parallels the actual use made of the standards. The trend in the direction of more general, if not loose requirements points in the same direction. This trend allows for and requires a more active interpretation. Companies can more easily use such standards for their specific organizational purposes. Finally, development of a number of new standards for new problem areas has emerged as a way to turn these problems into something manageable. Whatever the problem, a standard system is offering itself to help management structure and tackle it.

Tertiary explanations

The broad use of the general standards renders the conventional way in which the effects of using such standards are studied questionable. Both the primary and secondary group of explanations of the success of the standards - the benefits intended by the standard makers and the organizational "side" benefits respectively - are based on an understanding of the standards by which one can identify some essential and basic features of the standard and of the certification process. It is or has some features that again have some effects. Much research has pursued such core features and core effects as is the case in relation to other types of technology where "essentialism" - or the "onion peel theory of technology" - has played a role (Grint and Woolgar, 1997b). But the standards are increasingly broadly written texts that are open and needs a great deal of interpretation before they convey any meaning (Mouritsen et al. 1999).

We suggest that the process of using more general and non-mandatory standards - like ISO 9000, ISO 14001 – can be understood as a triple process of interpretation and social construction based on these texts (Bloor, 1991).

The first process of interpretation and social construction takes place through the general discourse on management theories and methods in society. By discourse we mean areas of intellectual struggle that have power effects on certain forms of practice (Foucault, 1982). Central actors in this area are consultants, managers, and researchers. Modes of communication are conferences, books, professional services etc. Through this process, it is defined what is at a given time important management problems and proper and efficient management methods. It is in this discourse that it is, for instance, "defined" that quality or the environment is an important matter. It is here, that goal setting, planning and evaluation is constructed to be representative of proper management. It is also here that more technical methods - such as using system standard like ISO 9000 - are interpreted: What is it really, how efficient is it, what can it do, what can companies expect? In this sub-discourse quality management professionals and certifying bodies are also taking part. The totality of this discourse produces arguments and expectations that ISO 9000 implementation lead to the primary and secondary benefits we have described earlier. Despite variation, there is a core in

the primary and secondary effects expected by the companies in many parts of the world, as we can see from the above mentioned studies of the motives for certification. But there is also a national cultural colouring. ISO 9000 is seen more as an organizational developmental tool in the Scandinavian countries requiring heavy employee involvement to be a success.

The second process of interpretation and social construction takes place in the companies contemplating to use a system standard. Brunsson has argued for the existence of a company internal cycle of high hopes, decisions to implement, results that do live up to expectations and a search phase when the companies are especially open to the general discourse (Brunsson, 1989). Companies in this phase can start with what is offered and defined through the general discourse but they do not have to accept it. The general management discourse may envisage certain benefits from using the standards. But the receivers/users may well be perceiving or choosing to use it in other ways than standard makers and the general management discourse assume. Management concepts are thus not spreading in an automatic way; they are "adopted" by very conscious users (Røvik, 1998). The manager of Ebo, for instance, saw standards as a tool to start a debate in their profession, and managers at Manpower saw - among other perspectives - a possibility of assuring consistency in a large, multinational organization with many outlets. The company specific discourse is colored by the companies' experiences with other management techniques and their problems and intentions. Often several management concepts are blended into a unique mixture that defies distinctions that are upheld in the general discourse. ISO 9000 is mixed with and said to be "in reality" the same as TQM, Business Process Reengineering, cultural change etc. One of the reasons that the company specific discourse might be different from the general management is that new actors specific to the company and consultants with a more technical background are involved.

The third process of interpretation and social construction takes place in the companies during and after the implementation of the management system that the standard requires. The effects - primary and secondary - have to be constructed. Normally, quality awareness, features like the degree of decentralization, the team spirit, the degree of management control and other of the benefits described are not regularly measured and obviously there. Actors have to decide that these benefits occurred, if not before, then at the time when a social scientist arrives and asks for the information. At that time, the respondent has to decide "which were the effects". Most of the organizational effects reported in the above quoted studies do not rest on anything else but self reports by companies and most likely by the managers responsible for initiating the use of the standards. The methods used in most studies do not restrain the social construction possible fully.

The three processes are shown in Figure 2 below. It is added that there is a feed back from the company processes - "experience" - to the general management discourse.

Figure 2: The social construction of the effects of standards

The functions of fashion

A fundamental question remains: Are the effects of ISO 9000 and other management standards socially constructed in the sense that a sober and scientific research would not see them? Or, does the main social construction regard the way the standards are interpreted in the general and company internal discourse, which are then producing substantial results corresponding to the basic dictum of "if men define situations as real, they are real in their consequences" (Thomas and Thomas, 1928 p. 572)?

We might open that discussion by asking: If the group of standards that can be freely chosen is as open to interpretation as argued, why then use them at all? Could Manpower not just decide the necessary routines and procedures that would ensure the consistent functioning of their outlets? Could Ebo's management not just raise the issues it wanted for debate in the professional community? Could a company under criticism not merely demonstrate and prove that they act in an environmentally responsible way without having to use a BS 7750 certification?

One should think yes. Management without standards should be possible and preferable to companies where no important customer or state authority requires it. Why don't they want to preserve their managerial freedom of goals and methods?

Let us consider the benefits that the companies get from using a standard.

First of all, by using e.g. an ISO 9000 or ISO 14000 standard, they choose to work with a subject and words - in this case quality and environment - that at certain times can enjoy a high degree of legitimacy in the general management discourse. The company is saying: We are working with this important subject. In the years around 1990, "quality" was one of the most popular and influential words in the management discourse. Quality was in the US the answer to the Japanese threat. Rank Xerox had discovered that the Japanese producers were selling photocopiers at prices that corresponded to Rank Xerox's costs of production. Japanese cars had 1/3 of the malfunctions that American cars had. The four big producers of semiconductors had become Japanese by 1990. None were Japanese in 1980. This was a national issue. Quality was also seen as something new and very different. "Total quality ... is a movement results are truly impressive. Dramatic reductions... (Quality) is too revolutionary to have any good synonyms" (Ciampa, 1992 p. xxii-xxiii and p. 7)). "Quality is an entirely new approach to management ... an entirely new philosophy of management" (Hiam, 1992 p. 1). Similar views on quality were found in other Western countries. The consequence of this is that most companies had to and do work with quality. In the US and UK, the number of companies reporting that they are "working with quality" is around 75% (Wilkinson and Willmott, 1995 p. 1).

Second, by choosing the standards as their specific method, companies are - or at least were in the years around 1990 - choosing a method with a high degree of legitimacy in the general management discourse. At that time, ISO 9000 had star quality. In many countries, ISO 9000

was "the thing to do". Today, that has leveled off in many European countries, but in the US and in Asia it enjoys a high degree of popularity. Other perspectives, e.g. the environment or social responsibility have however taken their place in the world of system standards in Europe.

Third, they benefit from the use of methods sanctioned by trustworthy and authoritative institutions, i.e. ISO 9000 standards produced by the International Organisation for Standardisation and adopted as national standards in more than 50 countries. Speculation may be made as to the number of company users that would support a general standard on environmental protection and social responsibility backed by Green Peace or Amnesty International. We believe it would be high. When the standard's use is audited through third party audit - e.g. by Bureau Veritas Quality International - other trustworthy and authoritative institutions will vouch for the company. There are also indications that a new source of legitimacy is being developed, namely the public opinion. In newer, freely chosen standards, we see requirements about publishing information, balance sheets, and company practices and in this way letting public opinion, administered perhaps by the press, trade unions, and pressure groups be those "authoritative institutions" that sanction the company.

Fourth, if the management paradigm in the standard - the content of the standard - also corresponds to widespread notions of good and sound management, then the use of the standard is of additional value. Here, ISO 9000 in its earlier forms had shortcomings. Its mechanistic and closed systems paradigm was a little too distant from modern management parlance. It was not totally without possible benefits, as this added to its image as something totally new and different. Nevertheless, the trend in the non-mandatory standard market, with ISO 14001 and the proposed revision of ISO 9001 leading the way, is going in direction of a more modern understanding of management. It is still very distant from current research traditions emphasizing open systems, limited rationality, and importance of personality factors as well as restrictions on management and manageability. But perhaps it is close to the way management is spoken of in the general management discourse that we described above. Furusten (Brunsson and Jacobsson, 1998b p. 52) argues, for instance, that ISO 9000 does not codify practice but codifies proper talk about management.

Fifth, in an increasingly competitive world of management concepts, solutions and fads, standards offer the company a well-organized method to work with or even solve certain problems: Quality, productivity, environmental responsibility, social responsibility etc. These partly new and at least broad concepts suddenly become operational and practicable: There is a beginning, a sort of plan, a checklist or an agenda (the requirements) and an end (the certificate, mark, logo etc.). You can organize it and explain it. Even if you are not supposed to leave quality totally alone, you can delegate it. Standards are practical ways of coming to grips with all too broad management concepts. It is like organized education: It is difficult to know how to become wise or knowledgeable in a subject. It is easier to describe how to get a grade. Moreover, who dare say that it is not a step in the right direction?

Finally, standards give a public and visible token or symbol for private effort. To pursue the education parallel: How can people know that you are wise if you do not have a grade? Especially, if they do not know you? Standards and certification provide a system of incentives to the individual company in order to upgrade itself. The company not only improves; it can

also communicate it in an accepted and institutionalized way.

Altogether, a popular standard offer a well ordered package of legitimacy, methods and incentives difficult to refuse. It can be seen as an arena on which to create and socially construct a number of different and desired benefits. Not only in the sense that the benefits will not appear to the independent observer, but as real benefits. "If men define situations as real ..."

We cannot spell out all the ways in which the legitimacy of the general standards can "create real results". But as an illustration of possible connections and as inspiration for future research, we offer Figure 3 as a sort of reversal of figure 1 that we presented in connection with the primary effects (Bergman and Klefsjö, 1991).

Figure 3: How legitimacy in a management standard can create results

- When a company can claim that it uses a well-known and respected method to improve and guarantee e.g. quality, it must be expected that customers will believe in the company and its products and buy more. This is conformant to empirical observations that the marketing effect of ISO 9000 certification was greater during the years when the legitimacy of this standard was highest, when it had star quality, if for no other reason then because only few companies at that time had a certification. In later years, it has been difficult to establish this sales benefit (Bryde, 1998). The fact that customers' belief in certified companies and their products is more important than substantial advances in quality is a plausible interpretation of the studies that do not show quality advances but still point to sales advances.
- Use of methods that are defined as correct by the general management discourse must also be expected to have positive psychological effects on the managers involved. Political correctness does not only have social effects but also let most people feel good and safe when they are correct. The management role is structurally unsafe. There are many and conflicting demands from groups around the manager. There are no agreed and sure methods to follow. Rather the manager is faced with a booming market of management tools and ideas that "instills fear for which it then holds out a prospect of relief" (Kieser, 1997 p. 62). Following some of the most praised methods can create a more sure and safe manager that knows where we go and how to go there. Such a manager is better able to lead (Bennis and Nanus, 1997).
- Use of a legitimate standard having a legitimate label could help to motivate employees to work hard and professionally. This is conformant with the fact that team spirit and cooperation are often reported to be higher during certification projects (Elmuti and Khatawala, 1997). This is normally interpreted as due to a degree of involvement, but the arena that the employees are invited into cannot be without importance.

· Use of a legitimate standard and certification can influence the public and the authorities so that they show increased trust in the company, as documented in a case presented by Mouritsen et al. (1999).

From these effects could follow other positive effects. Trust in the company might lead to more sales, fewer complaints. Employees that work hard and professionally might lead to better products etc. Altogether, it might lead to the improved corporate profitability.

The title of this article is "Management by standards - real benefits through fashion". Originally, we intended to entitle it "Management by standards - real benefits or fashion?" But we have had to conclude that that was a wrongly phrased question. Even if many studies are methodologically flawed, the reports of positive primary and secondary effects are so consistent that they cannot all be the result of imagination and wishful thinking. Some of these results must be there. So, perhaps the title should have been "real benefits and fashion." However, our discussion has let us to propose that there are positive functions of fashion in management. Therefore, a proper title, or at least conclusion to this article, is "real benefits through fashion". Fashion in management is not mainly attractive because it is fashionable, but because it is functional to use a fashionable and legitimate tool. Fashion in management does not, as the case of especially ISO 9000 shows, have to be carried by gurus, loud rhetorics and well-known companies as forerunners (Kieser, 1997; Huczynski, 1993). Perhaps such oversell is a sign of a loosing concept. However, the concept has to show how problems that are defined as relevant and political correct can be tackled in a convincing and legitimate way. Here, few management concepts surpass the mechanisms of accreditation and legitimization (in the form of certification) that the management standards have developed.

The makers of the non-mandatory standards seem, unconsciously perhaps, to have understood and accepted the mechanisms involved. They have - as seen in the analysis of the standards market - been choosing subjects for standards with a high management political prestige value and are constantly changing the management paradigms implied to conform to popular beliefs. They have maintained the central mechanism of external accreditation/certification. By keeping the standards open in their content, they allow the companies to reap the benefit of fashion and certification without too many restraints on their operations.

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