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The implementation of a quality management system in the not-for-profit sector

G.R.T. White and P. Samson
Bristol Business School, University of the West of England, Bristol, UK
R. Rowland-Jones
Wrexham Business School, North East Wales Institute of Higher Education, Wrexham, UK, and
A.J. Thomas
Logistics Systems Dynamics Group, Cardiff Business School, Cardiff University, Cardiff, UK

Abstract

Purpose – The purpose of this paper is to examine the rationale for establishing a quality management system (QMS) by obtaining ISO 9001:2000 certification in a not for profit small to medium enterprise (SME) in the UK. The rationale for choosing this approach over others to achieve operational stability and ongoing improvement is explored and an evaluation of its effectiveness undertaken.

Design/methodology/approach – A case study approach is adopted with the paper outlining the process of ISO 9001:2000 implementation in a single not-for-profit SME. The paper identifies the process by which the organisation prepares for certification and appraises both the changes required by the organisation and the scope of opportunistic improvements that resulted.

Findings – Through the correct development of the QMS the company was able to generate bottom-line savings and business performance enhancement. The paper shows that when the QMS is developed as part of a coherent initiative, lasting performance improvements are achieved.

Research limitations/implications – The pursuit of ISO 9001:2000 in a not-for-profit company provides an effective framework for similar companies to follow suit. Further analysis of ISO 900:2000 implementation through its application in a range of similar companies is proposed.

Practical implications – The paper concludes that the act of preparation for ISO 9001:2000 in this type and size of organisation constitutes a radical change and proposes that a transitive version of ISO 9001:2000 related standard, scalable for SMEs, would benefit the continued growth of this economic sector.

Originality/value – This study highlights the potential benefits of creating and implementing a QMS in a not-for-profit SME through the pursuit of ISO 9001:2000 certification. It shows that the tangible benefits of such an approach alone do not ensure that ISO 9001:2000 remains the preferred quality standard.

Keywords ISO 9000 series, Quality standards, Quality management, Non-profit organizations, United Kingdom

Paper type Research paper

Introduction

The importance of quality to any and all organisations is well known and a multitude of philosophies, management systems, tools and techniques exist with which it may be embedded into everyday working practices (Rowland-Jones *et al.*, 2005). Amongst these quality initiatives the ISO 9000 suite of standards is viewed as being able to

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deliver significant improvements to organisations in a variety of business contexts and sectors by structuring and optimising the internal processes (Martinez-Costa and Martinez-Lorente, 2003; Khan and Hafiz, 1999). This has been seen to result in tangible improvement to product quality (Noori, 2004; Mahadevappa and Kotreshwar, 2004; Thomas and Webb, 2003). However, this has not always generated immediate financial benefits (Tsekouras *et al.*, 2002; Wayhan *et al.*, 2002).

It is also interesting to note that though the implementation of ISO 9000 has become a global phenomenon there still appear to be some areas where the adoption of the standard has lagged behind (Thomas and Webb, 2003). The growing concern over the ability of ISO 9000 to deliver quality improvements by way of improved business performance and greater customer satisfaction may in fact be due to its process-centric approach (Fisher, 2005; Schenkel, 2004). It has also been suggested that ISO 9000 be just the first step towards achieving a total quality management (TQM) system (Chang and Lo, 2005; Ruzevicius *et al.*, 2004; Ho, 1993).

However, the greater demands and, in particular the higher TQM content of ISO 9000, are likely to lessen rather than improve the effectiveness of the standard's implementation in the future and also reduce its rate of return (Casadesus and Karapetrovic, 2005; Conti, 2004). This may account for a large proportion of recent thinking that has tended to focus upon the needs of both for-profit and non-profit companies that have already implemented a formal quality management system (QMS). These organisations or industry sectors are now beginning to ask "what next?" and are considering options such as TQM, business process re-engineering, Six Sigma, balanced scorecard or combinations of these methods as options for driving their quality systems forward (Yang *et al.*, 2005; Lupan *et al.*, 2005; Hwang and Chou, 2004; Senthil *et al.*, 2001). The omitting of the European Foundation for Quality Management (EFQM) excellence model from this illustrative example is due to the fact that the model is focussed toward overall business excellence.

Despite these concerns it is apparent that many organisations, particularly small to medium enterprises (SMEs), are continuing to consider ISO 9000 for the vehicle to structure and improve their QMSs. The purpose of this paper is to examine the process of establishing a QMS by working toward ISO 9001:2000 certification in a not for profit SME in the UK.

The rational for implementing ISO 9001:2000

The reasons for pursuing ISO 9001:2000 in the majority of organisations appear threefold. First, it may be driven by a customer request to conform with their internal quality control and supplier/vendor quality assurance systems. Second, it can be driven by the adopting organisation as a means or route to increasing home and overseas market share where ISO certification has a value that is somewhat transferable to product quality. Third, it can be seen as a means of improving internal processes and product or service quality.

Current research supports the view that customers in a supply chain have a preference for procuring goods and services from suppliers that are ISO 9000 certified (Corbett, 2006; Lee *et al.*, 2003; Rao *et al.*, 1997). Organisations have also pursued certification in order to gain entry to new overseas markets, improve competitive edge in their home market, improve their internal QMSs or as a direct requirement of their customers (Chini and Valdez, 2003).

The success of ISO 9000 implementation is dependent upon a variety of factors such as organisation size and employee preparedness as well as leadership ability and change methodology (Higgs and Rowland, 2005; By, 2005). Calisir *et al.* (2001) find that large companies are more satisfied with the results of ISO 9000 in terms of operational improvements, and Wilson *et al.* (2003) view that companies with higher sales are more able to absorb the initial cost of ISO 9000 and await the operational benefits. Barriers to implementation have been identified as the costs of training, consultation, registration and the practical difficulties of performing internal system audits (Stevenson and Barnes, 2001; Chini and Valdez, 2003). This, in part, explains why many companies, particularly SMEs, are dissuaded from pursuing the formal certification route of ISO 9000 because of its perceived resource cost (Briscoe *et al.*, 2005; Fassoula and Rogerson, 2003; Nwankwo, 2000; Guilhon *et al.*, 1998; Taylor, 1994). It is notable that even within the classification "SME" there appear to be links between firm size and QMS certification; and that more larger end SMEs (nearer to 150 employees) tend to be certified than smaller ones such as the micro-SMEs (one to ten employees) (Renuka and Venkateshwara, 2006).

The reason for organisations to adopt the standard also appear to have some effect upon the degree to which ISO 9000 meets organisational expectations. Bhuiyan and Alam (2005) find that Canadian companies implemented ISO 9000 due to market or customer influence. These companies subsequently experienced higher levels of benefit (primarily gained through greater market share, transition to higher value markets, etc.) than those companies which implemented it with the primary aim of making internal performance improvements.

These findings contrast with other studies which find organisations that implemented ISO 9000 with the specific purpose of driving internal operational improvements tend to experience the best organisational performance (Arauz and Suzuka, 2004; Chin and Choi, 2003; Yeung *et al.*, 2003; Martinez-Costa and Martinez-Lorente, 2003).

Contrary to previous research, Naveh *et al.* (2004) propose that organisations that benefit the most from implementation of ISO 9000 are not necessarily those that are the first in the marketplace to earn it. Instead they are the organisations that learn both from their own implementation experience and the experience of other implementers in their sector. This indicates that ISO 9000 has no uniform effect upon specific areas of functional excellence. Whether this is a property of the applicability of the standard to many different organisations and their varied needs, or signifies that it is a compromise solution that requires purpose and direction in its application in order to be effective, is debatable.

The increasingly significant non-profit sector whose unique operational conditions may not always be suited to the arbitrary application of management tools developed in other sectors (Myers and Sachs, 2003) tend to be more highly risk-averse than for-profits organisations. This is a factor which appears largely governed by the nature of their environment which often relies upon stability of service provision (Hull and Lio, 2006). This, coupled with the drivers for adopting a formal QMS that are a complicated mixture of pressure from sponsors, national governing bodies and an internal desire to standardise and improve, may make the seemingly intricate and expensive ISO 9000 standard appear unattractive (Cairns *et al.*, 2004). Although there is little empirical evidence to describe the adoption of ISO 9000 in the voluntary sector and among non-profit organisations Renuka and Venkateshwara's (2006) observation that ISO certified SMEs appear more willing to adopt new technology and modern management methods supports a view that the standard would only be considered an option by the

less risk-averse non-profit organisations. Reflecting these potential concerns and speculations, it is not uncommon for many non-profit organisations to question the purpose and value of their choice of QMS after implementation (Cairns *et al.*, 2004). Yet despite the perceived and actual barriers to implementation and even if ISO 9000 is not appropriate for the organisation, it has been suggested that is may still be used as a useful roadmap for developing existing internal systems (Stevenson and Barnes, 2001).

In summary, the paper has provided the reader with an overview of the effectiveness of ISO 9000 from a range of different perspectives (both manufacturing and service oriented). Whilst the standard aims to deliver greater bottom line savings in both product and service provision the authors clearly identify that the development of ISO 9000 in most not-for-profit organisations would benefit from further investigation and as such, experience and knowledge of developing a compliant QMS is lacking. This paper will therefore move towards outlining a case study on how a not-for-profit company developed their QMS while pursuing ISO 9000:2000 certification. It describes the change management issues and the benefits the organisation obtained from implementation of the QMS.

Case study

Founded in 1777 the Royal Bath and West (RB&W) Society was formed to "encourage agriculture, arts, manufactures and commerce" in the South West of England. In the nineteenth century the society established the RB&W show. The show has continually grown and diversified despite setbacks such as the outbreak of foot and mouth disease in 2001 and 2007 and has become increasingly attractive to non-rural communities. The event, now permanently hosted in 200 acres of grounds comprising concert and conference venues, attracts over 160,000 visitors each year. The decline of agriculture and increase in environmental awareness of the general public has prompted an expansion of its role whilst simultaneously created a needed to improve its competitiveness among growing numbers of environmentally and rurally focussed government and regional agencies. Modern objectives include the education of a wider audience in the "ways of the countryside", contribution to the development of the South West of England's regional strategy and promotion of environmental management and non-food crop opportunities among local farmers. The society has also embraced the technologies of the twenty-first century and established a virtual showground. This enables trade exhibitors and local small businesses that attend the annual show to continue trading online throughout the year.

The RB&W Society, its products, services and operations have gradually developed over its life of almost quarter of a millennium. Becoming increasingly focussed (and reliant) on delivering the annual shows for their considerable contribution to revenue and publicity, its processes, procedures and personnel skills had also become tailored toward delivering these events. Consequently, it lacked the modern management skills, tools and techniques with which to transform its operations to enable it to deliver upon its purpose of encouraging agriculture, art, manufacture and commerce in the South West of England. Recognising this deficiency and faced with the financial and social pressures of declining agriculture and increasing competition in a changing rural economy, RB&W began the integration of a QMS with other core business systems with the intention of bringing modernity to the 219 years old organisation. More effective and efficient use of society resources would decrease the society's costs while increasing its revenues.

Knowledge transfer project (KTP) rationale and objectives

Through the establishment of new business processes to support development, foster continual improvement and bring enhanced customer satisfaction, it was envisaged that the organisation would be able to identify and develop new products, continually improve its performance and gain a greater share of the markets in which it operates. With new management systems in place, RB&W would seek to access wider opportunities to expand its business activities. Central to this was the establishment of a formal QMS that would become the core of the newly developed management system. With a QMS in place, it was expected that the new work practices would bring about greater efficiencies and effectiveness, thus enabling the society to feel more confident in offering a better service to its customers. The independently verified certification was also proposed as a means to illustrate to customers (both internal and external) that the society could effectively respond to requirements of new and existing clients groups and hence win more substantial contracts.

It was also proposed that the integration of the new QMS would also support the culture change that had been recently initiated to enable the society to become a more business-led organisation that capitalised on its creativity, making maximum use of its assets. The new system would allow functional planning, monitoring and control of processes and performance measurement and thus enabling decision-making at various levels and as a result freeing the chief executive from micromanagement. The performance of the executive team was expected to improve due to the new processes that would enable better collaboration and project management and through the improved availability of sound business information on which to base decisions.

The initial scoping phase of the KTP, undertaken by RB&Ws management team and academics from The University of the West of England, determined that the ISO 9001:2000 standard would be an appropriate basis to develop the "new strategic business management systems" as the adoption of the standard would ensure that the new systems designed were built on sound, best practice principles. While meeting the basic requirements of the standard was considered to be a relatively straightforward process, it was recognised that it was the journey rather than the destination that was important in this project: the experience of adopting the underlying principles of the standard to enrich the society was far more testing than merely acquiring certification. Therefore, a merely compliant QMS would have done very little to either improve efficiency in the organisation or provide more information to management for use in decision-making and planning processes.

In order to drive forward a new management philosophy and system into the organisation a phased approach was undertaken by the project team. This phased approached consisted of introducing a series of business process improvement tools into the organisation that acted as "enablers" to the ISO 9001:2000 system, assisting its smoother transition into the organisation and ensuring that the company developed a holistic management system rather than just a "certification" system.

Process mapping, analysis and development

The process mapping activity was recursive in nature. In order to sufficiently detail a process, it was necessary to start with a high level map and review it several times, each time adding more information about the tasks and sub-tasks that constituted it. These high-level maps gave an accurate picture of the process: Figure 1 details the high

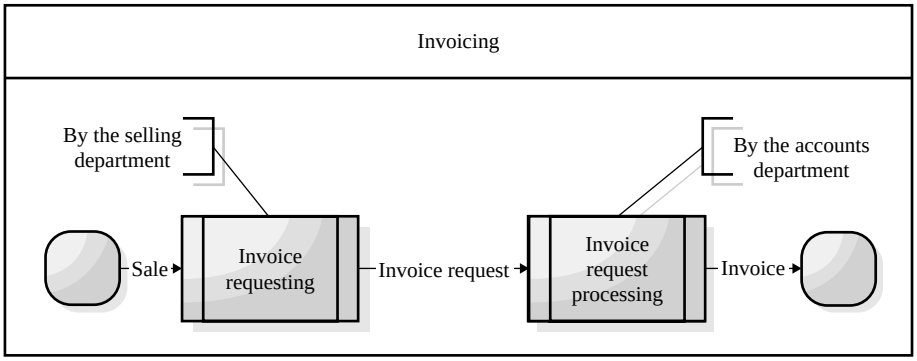

Figure 1.
Invoice processing high level map

level map of the invoicing process. Additionally, in order to provide background context for the processes, map generation was accompanied by surveys through which employees were asked to provide some quantitative data pertaining to the tasks they performed, such as the length of time taken to execute the different tasks, technologies used, the type of inputs and outputs, etc. It was only after the processes had been identified and then mapped in detail (Figure 2) that it was possible to analyse them to identify weaknesses, inefficiencies and wastes. Measuring the existing activity durations allowed the resultant improvements to be quantified and provided useful objective evidence of the value of performing the re-engineering phase of the project.

The analysis of the processes revealed many weaknesses and inefficiencies. For example, it was possible for modifications to be made to company data in one database but since data was often duplicated in two or more separate databases some departments were operating using erroneous or out of date information.

The development phase was driven with two perspectives:

(1) Reconfiguring the business processes to remove unnecessary and duplicate activities to improve business effectiveness.

(2) Automation and waste elimination in processes to improve operational efficiency.

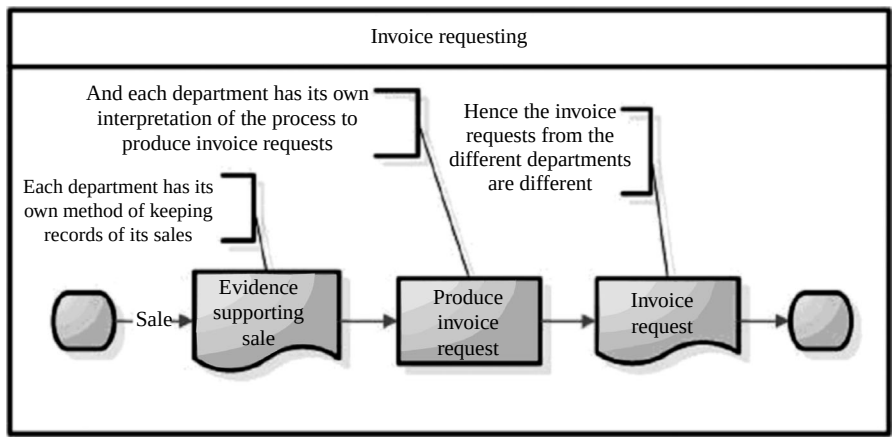

Figure 2.
Invoice processing sub-process "Invoice Requesting" detailed map

A major improvement was made in the accounting function through the adoption of new accounting software. Although the transition was to a less feature-rich software package the new system was a major improvement in several ways:

- It better matched the fundamental requirements of the organisation and thus supported the overall business strategy more effectively (Alter, 1996).
- It utilised a graphical user interface instead of a text interface which offered further productivity benefits.
- Numerous databases were rationalised into a single data repository, thereby improving data quality.

QMS implementation at RB&W

The route taken by the RB&W Society in its adoption of ISO 9001:2000 confirms much of the debate presented in the literature, i.e. that it is a vehicle for structuring and optimising internal processes, and that it produces tangible improvements to product quality but may also be very costly.

The process-based approach of ISO 9001:2000 suited the need of RB&W to focus upon a discreet sector of its business in order to effect the most necessary and beneficial change. Rationalisation of the accounting processes not only streamlined the method by which the tasks were completed but also had significant positive impact on the business system as a whole since it enabled a corresponding improvement in the quality of response to customer queries. Such a process-based approach is known to be a useful way to identify management practices (Kiraka and Manning, 2005) and thus forms the first step in generation of formalised process documentation that is vital for full accreditation.

The downside of such an improvement is the expense and risk of making the transition between accounting systems. Whilst it is conceivable that some degree of the benefits could be realised through rationalising the existing accounting systems the cost of creating new database structures, data testing and transference would not be insignificant. Furthermore, without the Accounts department being substantially revised by changing the accounting software the opportunity for recreating the previous environment of *ad hoc* dissociated data repositories remains. The act of re-inventing the accounting systems also provided momentum to the ISO implementation project, indicating that it was well-funded and backed by management commitment.

Cultural and change management issues

Whilst the costs of training, re-engineering, registration and consultancy have been identified as major inhibitors to ISO implementation, the most significant barrier in this instance was employee and resistance to change and management preparedness. RB&W's personnel and processes have developed throughout its lengthy existence, largely without exposure to modern business and management techniques and trends. The adoption of ISO 9001:2000 was preceded by extensive discussion and training, however, the moments of truth when individuals were expected to contribute to the redesign of their tasks proved to be a significant barrier to implementation. Although this did not prevent the changes being made it often caused significant delay and placed further demands upon the KTP and management resources.

The risk-attitude of organisations has also been cited as a factor that effects ISO 9000 adoption, highlighting that non-profit SMEs may be more risk averse, and less

likely to follow its prescribed path. The RB&W Society demonstrated a commitment to change, both in terms of expense and resource, which at first appeared to conflict with this concept. Whilst RB&W operates in a sector that is fiercely competitive and would appear suited to risk-averse activities it maintains the entrepreneurial spirit of its founders, to "encourage technological improvements through enquiry into existing practices and theories, and experimentation which could lead to improvement". In this respect, the society may be seen as not highly risk-averse as it applies the maxim inwardly upon itself as well as outwardly to the wider community.

Conclusion

It remains the matter for debate, and is individually circumstance-specific, whether the ISO 9001:2000 standard is an achievable goal for many organisations, especially non-profit and risk-averse SMEs. The RB&W Society has undoubtedly gained much by the introduction and development of the standard, however, its value as a signposting of "quality" within the organisation in this sector is yet to be fully evaluated. Alternative standards or awards such as BS EN ISO 14001:2004, or the European Eco Management and Audit Scheme are currently being explored for business "value" in the marketplace that may be achieved more immediately.

However, in the short to medium term RB&W intends to continue with the current QMS approach in order to rationalise and improve its operating systems and recoup the rewards in terms of operational efficiency, effectiveness and product/process quality but without intending to gain the final ISO 9001:2000 certification. This does reflect the self-diagnostic effect of business excellence models such as EFQM, which may prove a more efficient use of resource for RB&W and may be adopted as complementary tools for ongoing strategic quality development (Russell, 2000).

Although the introduction of ISO 9001:2000 was viewed as necessary and was a valuable learning experience, there may be an alternative and more rewarding destination to reach. This supports the evidence that SMEs may appreciate the inherent value of ISO 9001:2000 but are unwilling or unable to embark upon it due to its perceived prohibitive scale and cost. This significant sector of the economy may then not benefit from the tangible and intangible benefits that the standard has been shown to deliver. It suggests that a scaled-down version or interim version of the standard is needed to encourage many more organisations to embark upon the journey toward establishing a formal QMS and associated benefit from significant operational improvements in the process.

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Corresponding author
G.R.T. White can be contacted at: gareth.white@uwe.ac.uk