

getting to grips with certification

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Small and medium-sized enterprises (SMEs) make up 99 per cent of UK businesses, according to BERR statistics. Managers are assailed by an expanding and constantly changing range of regulatory requirements at local, national and European level, as well as industry-specific regulations, codes and standards. Customer and competitive pressures demand ever-higher standards of quality and service, while businesses also need to accommodate environmental, health and safety and a growing number of other requirements from interested parties such as public authorities and funding bodies.

The adoption of standards such as ISO 9000, ISO 14000 or OHSAS 18000 should help businesses to structure their operations and work towards improvement in these areas. But in practice these can easily be seen as another hurdle for hard-pressed SMEs, many of whose employees tasked with safety, health, environment or quality management (SHEQ) may have acquired those responsibilities as incidental to their 'main' role and developed their expertise through experience rather than any formal training.

Therefore, the challenges for many SMEs, when working towards certification while maintaining delivery of their core product or service, are:

- identifying and sourcing the regulatory provisions relevant to them
- structuring the information and processes within the business, while accommodating the external requirements
- integrating the different demands on the business systems to support effective management practice, but with tools tailored to the SME rather than the large corporate marketplace.

PROMIS

The PROMIS system was developed specifically to provide SMEs with easy access to tailored information and services to respond to the increasingly complex pressures of regulation. The concept of the PROMIS integrated management system has been developed, refined and piloted through a succession of multinational projects over more than 12 years, with support from the European Commission. Project partners have included

public and private technology, business, educational and standards organisations from Germany, Italy, Romania and Greece as well as the UK.

In 1995 the prototype for the myPROMIS software won the 16th International Innovation Award for Technology and Quality in Rome. However, a market validation project across four countries during 1999–2001 considered that the SME marketplace was not sufficiently internet-mature for large-scale deployment at the time. It was not until 2007 that the deployPROMIS project for the market launch was begun and in 2008 the European Technology Platform for Industrial Safety recognised PROMIS software as an example of best practice.

PROMIS combines disparate sources of information, legislation, e-learning, internal controls and external help through an internet portal, requiring no additional software beyond a standard internet browser.

The visual presentation is based on a three-dimensional pyramid with each face fully integrated with the other two. Each face addresses the three primary compliance aspects of SHEQ and provides access to the three principal types of support accessible through the portal:

1. information content, eg legislative or other requirements applicable to the user's industry sector
2. training, including self-help, download materials and referrals to other training sources
3. services, access to and online interaction with qualified subject matter experts and business support specialists to help and support the SME user if and when they decide they need it.

PROMIS pyramid

The pyramid is arranged in five levels, representing increasing levels of commitment or detail as the user develops his or her knowledge or use of the system:

1. initial review: a self-assessment questionnaire for the SME to ascertain their current position in relation to SHEQ best practice and performance
2. legislation: access to relevant and filtered legislation at national and European levels
3. how to improve: e-learning and development

- resources, selected and tailored to support the relevant industry and the SME market
4. controlling your processes: applying management controls and best practice models and standards to improve SHEQ compliance and performance levels, with the optional support of qualified specialists
 5. myPROMIS: the fifth level and ultimate goal for optimal use of the PROMIS service. This level constitutes a complete internet as well as intranet workplace in which an SME can define and manage all its business processes, documentation and resources. myPROMIS supports the user to create a structured electronic handbook, which automatically follows the various ISO SHEQ requirements.

Throughout the pyramid the SME controls its own pace and which of the levels or associated services, such as training or support, it decides to use. The SME could use PROMIS simply to produce an initial status report on its SHEQ compliance and to source further information and guidance for its own use.

However, the subscription would cover all aspects and as a single-entry, integrated point of access to SHEQ information, support and services at both national and European level, PROMIS is currently believed to be unique in the international marketplace.

Benefits

The full commercial roll-out of PROMIS in the first three countries, Germany, Italy and the UK, will start later this year. The internet and market landscape has changed radically since 2001 and a recent pilot project in Germany demonstrated that SMEs are now ready and able to derive real efficiencies from the online business management system offered by myPROMIS. These included improved coordination of documentation and ready access to linked business information within the system and in turn a better understanding of the business processes by their own management.

Austrian recycling company Kovac Schrott has been using the prototype software for myPROMIS for three years as the basis for its integrated management system.

Commercial manager Josef Hrastnig states: 'We

maintain practically paperless ISO 9000, ISO 14000 and health and safety system certifications using myPROMIS. Updates can be made continually and the cost of interim audits can be kept within reasonable limits for a small firm like us. The external auditors are very positive about the use of myPROMIS and have welcomed the further development of the system.'

One lesson learned has been that although PROMIS improves internal management and efficiency once installed, the effort of initial set-up and data input of business information can be difficult for resource-strapped SMEs. Herr Hrastnig notes: 'The system demands minimal maintenance effort and so has paid for itself over the years. But the initial set-up costs were very high.'

To alleviate this, the portfolio of PROMIS services now includes the support of local management assistants (LMAs). Trained on the structure of PROMIS, LMAs will work with user SMEs to help set up the system much more quickly and without having to take staff away from their regular duties.

Here in the UK one of the first sectors set to benefit from PROMIS is the chemical industry, for which a dedicated PROMIS pyramid is already being developed (see box). Other specialised sectors under development across Europe include construction, hotels, restaurants and catering, textiles and clothing and food manufacture.

Consultants

PROMIS depends upon the support of consultants and consultants' organisations to supplement SMEs' efforts to maintain compliance or sustain business improvements. This is an essential part of the PROMIS offering as an integrated gateway to content, training and support services.

In turn, PROMIS offers consultants (many of whom work for or run SMEs themselves) a prime source of structured information, training and learning materials, online collaboration or discussion with other consultants and, not least, an introduction to appropriately filtered and 'warm' business leads.

These are generated by the option of the SME users, at any point, to seek specialist assistance. The user identifies his or her sector, the type of assistance he or she is looking for (eg environ-

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mental compliance within the restaurant sector) and the location, to access a filtered list of suitably qualified consultants. The SME can view details of the consultants, including their location and decide who to contact for assistance or for a proposal.

Furthermore, since initial contact with the consultant can be supported by the report generated from the SME's initial review (Level 1), the preliminary information-gathering stage can be greatly reduced, saving money for the SME and facilitating a more rapid advance to the specialist advice and support work which is of greater value to both parties.

The consultants' database is carefully controlled and consultants listed on the basis not only of their sector experience and SHEQ specialisms, but also their specific experience of working with SMEs and knowledge of PROMIS. A robust and objective accreditation process is integral to its credibility.

For this reason, PROMIS partners initiated an international Workshop Agreement on the 'Competence of specialists advising SMEs concerning integrated quality, environment, health and safety' under the auspices of CEN, the European Committee for Standardisation, which is actively supporting the project. The outcome of this workshop will also be available to ISO Technical Committee TC176/SC3 for their next review of ISO 10019, on guidelines for the selection of quality management system consultants.

PROMIS accreditation, meanwhile, will dovetail with other accreditation systems to provide an internationally recognised qualification for consultants working through PROMIS in the SME marketplace.

Future PROMIS

Using PROMIS could help SMEs to become market leaders by adopting the system for their own use and the consultancy community as a route into the SME market. There is also significant potential for further providers of relevant information, content and training materials to partner with PROMIS as a supplementary route to market for their products and in order to ensure that the widest possible range of the best materials is available to SMEs.

PROMIS and chemical process safety

Chemical operations require a process safety management (PSM) approach which considers hazards and risks at the facility itself and often the potential impacts outside it, on the community and the environment. Typical areas of concern include toxic releases, fires and explosions. While these issues are not confined to SMEs, managing them may present a greater challenge when limited resources are available.

Richard Gowland, technical director of the European Process Safety Centre and Chair of the European Technology Platform on Industrial Safety has used the framework of PROMIS to create simple PSM structures proportionate to the potential consequences if control is lost. This work follows his involvement in the European S2S project, aimed at helping SMEs in the chemicals sector to improve their process safety performance (see www.safety-s2s.com) and provides a means of putting its benefits into practice.

The PSM approach is designed to conform to the requirements of the Seveso 2 Directive and its various EU Member State derivatives. It is supported by simple tools to calculate and evaluate the scale of effect and the size of affected zones from potential incidents, evaluate the depth and detail of the 'potential consequence', assess the degree of protection needed and compare it with the existing system using 'layer of protection analysis,' eliminating or managing any deficiencies to an acceptable degree.

The chemical process safety pyramid incorporates tools for all the key stages and links to the relevant legislation and descriptions of common means of conformance.

Richard Gowland comments: 'The evolution of the chemicals sector has resulted in many opportunities for SMEs but also new burdens and risks. The PROMIS chemical process safety pyramid will provide a focal point for consultants, companies wishing to widen the use of their own methods and help the industry to improve, academia and members of the S2S.'

Universities and SME certification

The recurring challenge to establishing formal quality certification in SMEs is resource availability. Owners and managers are interested in working towards ISO 9001 and more industry-specific certifications, but the feeling is that neither money nor manpower can be spared.

A business-facing educational institution such

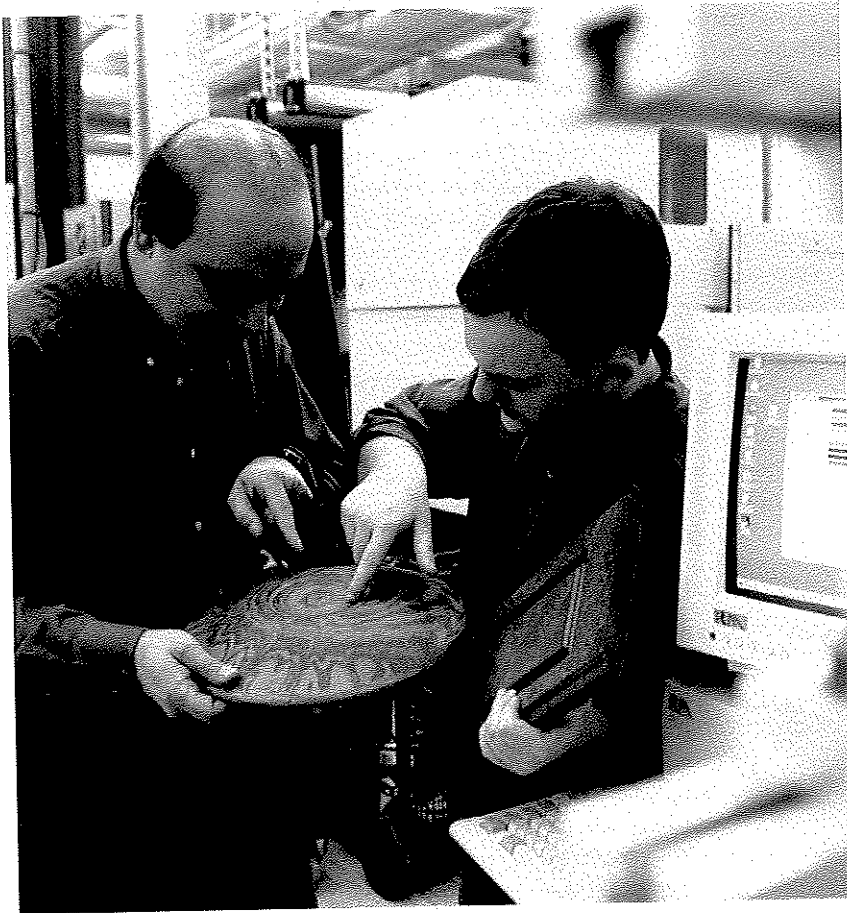
as Birmingham City University's Technology Innovation and Development Faculty finds many small businesses are still slow to recognise the importance of quality. Since establishing the faculty's home in the Technology Innovation Centre (TIC) in 2001, the university has developed a dedicated TIC-based business solutions team which has become a leading knowledge-transfer provider for UK-industry, in sectors from aerospace to agriculture. The university has helped over 3,000 SMEs since 2001.

Help for SMEs

University business solutions teams find quality certification can be key for SME technology-transfer and skills-upgrading programmes. Such schemes may start with enterprise resource planning, introducing computerised product design and development systems or supply chain, lean and related world-class manufacturing management projects. Quality is almost always integral to ensuring such advances are implemented effectively. Once introduction of quality systems is agreed – often with European or UK-government funded industry-improvement support – university quality experts or supervised graduate technologists will take several months to help the company complete the task.

For cost-conscious SMEs, university-run programmes can offer valuable and affordable expertise. Delivering technology-transfer schemes for regional automotive, supply-chain development activities, such as Accelerate and the West Midlands Manufacturing Advisory Service, as well as carrying out projects such as the award-winning EnviroINNOVATE, are all ways in which TIC helps SMEs. For example, the EnviroINNOVATE project provides specialist environmental technology support to SMEs in the West Midlands. It was established to help companies exploit new markets and grow sales of environmental goods and services, by providing funds to undertake projects of between five days and six months.

Many businesses particularly benefit from undergraduate, graduate or postgraduate student industry-placements. These can vary from a 16-week, skilled postgraduate placement or a year-long undergraduate project, to a qualified graduate in a Knowledge, Innovation, Technology



Staff and students at the TIC (clockwise from top): examining a composite materials test, mechanical stress testing and Peter Rayson



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Case studies

Hugo Technology

Hugo Technology is an independent medical equipment maintenance and management company, with a team of 15. It was set up in 2003 by ex-NHS biomedical technicians, Andrew Parton and Warwick Oakey in response to a market that needed third parties to provide a quality medical equipment service department for the private sector.

Contact with Birmingham City University at Medilink, a UK medical sector networking event, resulted in a business development strategy encompassing ISO 9001. Over three to four months a university consultant helped integrate quality tracking, traceability techniques and other established practices to meet ISO audit requirements and the policies, procedures and manual were finalised to gain certification.

Warwick Oakey commented: 'We're very glad we have ISO certification. Despite trusting in our own quality ethos, official endorsement gave us new confidence in business development. It built on our meticulous approach, making complete sense of what we instinctively do to underwrite patient care.'

The step proved vital, putting Hugo in the running for major manufacturers' contracts and securing a role with Nutricia, a major supplier. Winning a national contract to maintain and refurbish enteral feeding pumps for Nutricia made Hugo responsible for every unit in the UK as well as Nutricia's technical helpline. Enteral feeding entails delivering nutritionally complete food directly into the patient's stomach. The pumps, used widely throughout hospitals and nursing homes, must be annually totally cleansed, sterilised and made good as new; quality, durability and reliability are vital.

After five years in business, Hugo services doctors' practices and hospitals from Southampton to

Merseyside. Its reputation even prompted a contract to commission the equipment throughout a brand new, state-of-the-art hospital.

BST Supplies

Wolverhampton-based BST Supplies Ltd produces a virtually unlimited range of specialised, high-quality, precision fasteners to customer specifications. Applications extend from the ultra-high integrity needs of gas industries to nuclear submarines – its fasteners are used two miles under the sea!

Quality, health and safety and environmental manager, Paul Bate, holds metallurgical qualifications and an MBA. With an in-depth grasp of the need to ingrain adherence to high standards across the workforce, he said: 'When I joined BST the business had ISO 9001 certification as an absolute essential. Customers demand conformance to strict standards and this now encompasses the environment.'

Following a key customer's nuclear engineering seminar, Paul Bate sought Manufacturing Advisory Service guidance regarding ISO 14001 certification. Advised by technology transfer consultant Paul Shipton, two company-wide presentations followed. Then a two-man implementation team, comprising Paul Bate and colleague Graham Hart, set about developing the necessary culture.

Key aspects included the PTFE coating plant waste disposal and segregation of high-value scrap materials. Over several months BST's working environment was transformed to gain the ISO 14001 award and everyone in the company became sensitised to environmental issues, both inside and outside work.

The result of raising the overall quality of its operations is reflected in BST's growth, with the number of employees rising from 30 to 54 in under four years.

Transfer Scheme or a one to three-year Knowledge Transfer Partnership. A series of these recently helped the Morgan Motor Company to win the coveted Lord Stafford award for Achievement in Innovation.

As education and business increasingly

converge, SMEs can and should look to universities and colleges for affordable technological and skills support. Quality is fundamental to both and institutions such as Birmingham City University can prove to be vital allies to smaller businesses competing in global markets.

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