ISO 9001 and ISO 17025 - A South African perspective.

By: Dr Shalini Singh, Durban University of Technology, Department Operations and Quality Management.

Quality management has always been underrated and its benefits underplayed. Yet leading organisations continuously punt the implementation of a variety of quality tools. Management systems are designed to enhance the operation, effectiveness and competence of organisations adopting them. Unfortunately, negative and bad practices adopted has steered many prospective organisations away from them.

This research aimed to investigate the status of management systems (ISO 9001 and ISO 17025) from a South African perspective.

The objectives of the study were to determine the challenges, perceptions and attitudes of employees and managers regarding these systems. The challenges were investigated in terms of operational activities and difficulties in maintaining these systems.

The study adopted both the qualitative and quantitative methods of research. The quantitative research was represented by 17 South African organisations and 1 European organisation, while the qualitative research was based on literature from India and Italy.

A questionnaire was designed to compare if the qualitative research shared similar challenges and perceptions regarding quality. The quantitative research from the employees showed that in most instances the systems were implemented by employees from the organisation, however of the 17 organisations investigated only 2 consultants/employees who implemented the systems had tertiary qualifications in the quality discipline. The reasons for adopting these management systems in descending order of importance were mainly to foster good work practices, to promote customer confidence, to export, by customer instruction and a directive from a parent organisation. Many practitioners believe that the reason for adopting management systems determines the importance and the level of commitment placed by employees on maintaining them.

Only 4 organisations indicated that they adjusted documents prior to a surveillance audit. It emerged that areas which needed attention were, difficulties in monitoring and maintaining the system, following a paper trail, lack of suitable number of employees, cumbersome corrective actions, lack of training, increased volume of work, ineffective quality department and a time consuming QMS. Possible areas for improvement highlighted by them were, effective training, computer software to maintain the system, a synergistic relationship between corrective action and audits, more skilled workforce, explaining the importance of quality to the workforce, encouraging open discussions about quality and an organisation wide involvement of employees. The quantitative research from the (3 senior) managers showed that quality management formed part of the strategic plan within an organisation and that top management was serious about accreditation in some instances. Two managers indicated that in most cases, their supervisors were able to help them with queries, equipment was calibrated timeously, employees were well trained but lacked understanding in quality. All the managers concurred that they had regular quality meetings, had the latest technology, sufficient equipment and that their management systems were implemented by a consultant from outside the quality and their organisation’s discipline. Although there was concern
that there was a lack of time to complete work sometimes, all managers were of the view that the management system was easy to understand, changes were easily implemented, internal audits were far more effective than external audits and external auditors were afraid to raise findings and that the process approach was not adopted on the shop-floor. Management systems in some instances were incorrectly interpreted and more ownership was required to maintain them.

Findings from the global manufacturing organisation presented that this organisation conducts 20 effective internal quality audits per year. Although some employees are sceptical about quality, there is no compromise of quality. Quality at the source is practiced, and achieved by understanding critical control points and warning levels of all processes.

Overall the qualitative findings from Italian and Indian perspective showed that implementation of management systems were ritualistic and minimalist, and that this lead to ceremonial conformity. The real functioning of organisation was inconsistent with documented QMS and that there was an artificial separation between formal and informal activities in terms of what was included in the QMS. There was also a lack of process management diffusion.

The recommendations of the qualitative findings were:

- To manage quality using a new culture towards effectiveness of action and results
- Must have co-operation from suppliers and customers and that they must be integrated into the organisation’s practices
- Effectiveness of the QMS depends on internal support which must have technical and specialist knowledge
- Some of the repercussions of not having above are: no internal support (downtime), external support (expensive), processes cannot be optimised, continuous improvement is at risk
- Need a new meaning to audits which must move from a compliance audit to performance audit that is to look at level of implementation, effectiveness of QMS, adequacy of QMS and manage capabilities.
- The Italians want to focus more on analysing customer requirements, defining processes, controlling processes, cost, flexibility and use ISO 9001 as foundation for adopting Total Quality Management (TQM).
- The Indian organisations want to know their current status, determine their desired status and design a QMS to achieve this desired status. In addition they want to reduce complaints, rework and number of defects.
- Indian practitioners found that an ineffective QMS could be attributed to accepting incorrect objectives and having unrealistic expectations of QMS.

Comparing the qualitative and quantitative work shows that there are a number of similarities between the experiences of organisations operating these management systems globally. Some of the similarities which can be seen are: lack of understanding or implementation of process approach, ineffective audits, poor technical support due to shallow knowledge of the discipline, simplistic understanding of QMS by employees and cumbersome paper trails.
It is worthy to note that emanating from the quantitative research managers and employees have conflicting perceptions about the management systems especially when it came to training, calibrations and operational ease.

Discussions which emerged from the findings highlighted the following possible areas which could be focussed on to improve the performance of management systems. These are as follows:

- Is the information given to consultant from top mgt when implementing systems adequate? This idea was proposed to get a better understanding for the poor implementation of the management systems. It is also hoped that this will determine if the gap in the implementation of management system is due poor communication between top management and the consultant, if the consultant is aware of the strategic goals and direction of the organisation and if the consultant understands the discipline, before designing the QMS. The degree of alignment between the strategic and operational goals will also become evident.

- Understanding and investigating the role and suitability of the quality change agent is very important. Quality management systems rest on a discipline be it mechanical engineering, chemistry, food technology or others. For the QMS to be effective, both the consultant and the quality change agent need to understand not only the science of the quality management system but also how it integrates with the disciplines mentioned above. This should make the QMS a living tool, enable the optimisation of processes and promote innovation and creativity.

- Focus on the relationship between the training and implementation of the QMS and the competence of the work force should also be evaluated. Is the training conducted of the management systems conducted once documentation of the QMS has been completed or is training conducted periodically during its implementation and adjusted according to the competence of the workforce?

- Would the workforce buy-in more readily to the QMS and change their culture if the union was part of the change and implementation process?

- Are internal auditors aligned to the requirements of external auditors or is there a gap in the findings from both the groups? Does the external auditor’s consultation with the internal auditors report cause them to overlook important aspects of the QMS?

Perhaps the discussions above could be an opportunity for conducting research to move forward in the quest to uplift quality management in South Africa.

Bibliography