



e - Quality Edge

bringing quality information to South Africans since 1996

SAQI

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CONTENTS

PAGE

Welcome to our Special March edition of our e Quality Edge 1

Quality and the Toolmaker
By Paul Harding 2

The need to drive out fear to improve Quality
By Paul Harding 4

Top Shindan Audits
A Revolution in Top Management Commitment
By Paul Harding 7

Why don't people want to perform menial tasks?
By Paul Harding 11

Why don't people want to perform menial tasks?
By Paul Harding 13

SEL has no 'sell-by' date
By Dr Richard Hayward 14

SAQI 2023 TRAINING PROGRAMME 15

Welcome to our Special March edition of our e Quality Edge



Paul Harding

This week I will be celebrating my eightieth birthday. It has been a long journey and the last 35 years have been focused on improving quality performance both in the organizations I have worked for and promoting local and international quality through SAQI.

I have been encouraged by SAQI to dedicate this newsletter to several articles that I have written over the past few years. Some of you may have read some or all of these articles before. However, all the articles have a common thread and I feel that they should be read as a collective and not as individual articles. Like Systems Thinking the whole is greater than the sum of the individual parts.

The first one is Quality and the Toolmaker and is appropriate because my first job on leaving school at 15 was an apprentice toolmaker. We then take a broad view of Top Shindan audits and Hoshin Kanri. This was the stage of my life when I truly began to understand the broader approach to achieving top quality results. We continue with Deming and particularly the need to drive out fear in the workplace. A philosophy that I adopted when I first moved into management. We then focus on a topic close to my heart of performing menial tasks no matter what your perceived status in life is. Finally, we look at big picture thinking when it comes to organizational excellence and move away from working in silos. I hope you enjoy this edition, and I would like to hear any comments you may have about my thoughts.

I am grateful to SAQI for allowing me this opportunity.

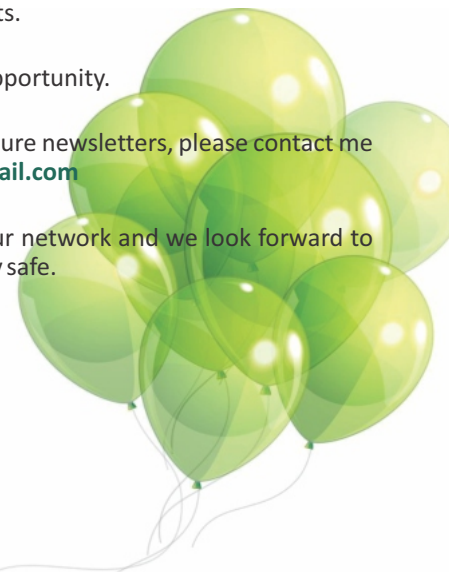
If any of you would like to contribute to future newsletters, please contact me on my new email address paulhoshin@gmail.com

Feel free to pass on our newsletter to your network and we look forward to input from you for our next edition and stay safe.

Sincere wishes

Paul Harding

Paul Harding
SAQI retired Chairman



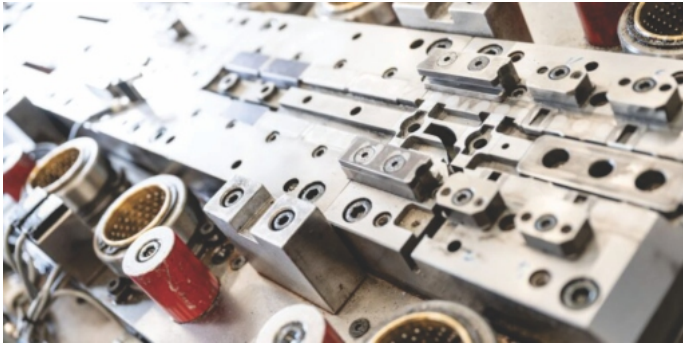
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Quality:

helping South Africans live, learn and work better

Quality and the Toolmaker

by Paul Harding



I am often asked how I became involved in the Quality profession and my immediate answer is that it was by accident. Of course quality should be all about planning and to quote John Ruskin's famous words: "Quality is never an accident; it is always the result of intelligent effort". So should people coming into the Quality profession follow some form of career path and study Quality as an academic subject?

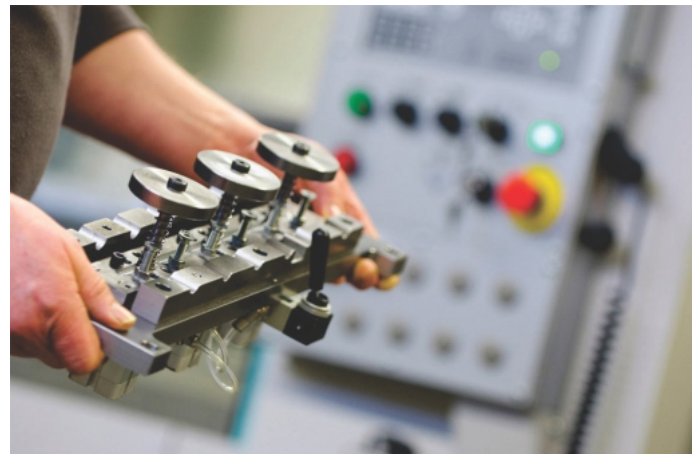
The definition of quality

To help us decide on what attributes a Quality professional should have, let us consider what the definition of quality should be. My favourite definition of quality is still something that could be found some years ago in the ISO Standard 8402. This definition described quality in the following way. "The totality of features and characteristics of a product or service that bears on its ability to satisfy stated or implied needs" Now this definition was far too complicated for the average person to grasp and was quickly watered down. However, this definition is still also a favourite amongst many of the older Quality professionals as it is really saying, "Quality is everything that makes a customer satisfied".

The attributes of a toolmaker

Now I have mentioned that I came into the Quality profession by accident so what was my original field of work? Well I started my working career as a toolmaker. Now before you get the impression that I made screwdrivers and pliers let me explain a little more about tool making. Toolmakers are a dying breed of craftsmen without whom none of today's hardware such as vehicles, fridges, ipads, laptops, cellular phones, cookers or aeroplanes would be available. The profile of a toolmaker needs to contain all the quality attributes found in the ISO 8402 definition of quality. The toolmaker has to be trained in the use of a variety of precision hand tools and machines to enable him to accurately perform work. Even if these machines are computer controlled someone has to create the programme and indeed build the machine. The toolmaker has to work to fairly

rigid tolerances in order that the end product, the tool or die, can consistently deliver the component part that is required by the customer. Now the argument is how accurate must the work of the toolmakers be in order to perform to the requirements necessary in the application of their trade? Now here lies the crux of the matter. Most people accept that there is no such thing as perfection, so there must be a tolerance band. No argument. But people often overlook the fact that the tolerance should be there to cover the wear and tear on the tool itself during its life span, in the case of the automotive industry about five years. So the tool itself has to start its life with an accuracy way inside the limit of the tolerance of the component part that the tool will produce. If we are talking about a press tool that produces automotive sheet metal parts or cookers or fridges, other factors like chemical or mechanical variation of raw materials also affect the accuracy of the final part. If a tool is made up of a number of stations then the toolmaker has to take account of the tolerance "creep" which is an accumulation of variation from one die section to the next. In some instances of multi stage progression tools more than five hundred individual sections could make up the final tool. So if each section had an error of just a few microns, the final tool could not be assembled to produce the intended component. So the tool cannot be the result of an accident. It must be the result of intelligent effort put in by the toolmaker to plan each stage of the process using the correct materials to the right specification. Then each stage must be checked and verified that each part will interact with other parts in order to deliver the final product to the satisfaction of the customer.



The attributes of a Quality Management System (QMS)

Let us now look at the attributes of a QMS. If we start off with a basic system comprising of stand alone procedures that is only focusing on the individual requirements of ISO 9001, will it be

...continue on page 3

capable of delivering an accurate product that is within the tolerance required by the customer? Then what if parts of the system are not clearly thought out or the system as described is poorly applied and maybe even abused? If that is the case the QMS may not be an integrated approach to satisfy the customer but purely a set of individual activities that may lead to an even more inferior product (service). So the QMS needs to be set up with attention to detail of all its component parts that interact with each other in order that the “creep” from each part of the system does not affect the viability of the system as a whole. Like any tool the QMS also needs to receive regular maintenance in order that the original intended purpose lasts the life of the product. This maintenance aspect of the QMS should be addressed by ongoing audits as well as the Management Review as stated in the Requirement Standard.



The role of the auditor

Can you audit the work of the toolmaker? The answer is to a degree yes you can. Some of the “building blocks” or individual die sections of a tool can be checked for accuracy during each stage of manufacture but at the end of the tool build, the tool either produces an accurate acceptable part or it doesn't. Toolmakers generally would feel insulted if a third party checked each stage of their work. Yet this practice is readily accepted in production areas. This is what makes the role of the toolmaker different; they audit their own work as each stage is developed. There is no place to hide or no one else to blame if the tool doesn't work. Only lengthy planning, working to tight limits, applying project management skills and not accepting inferior workmanship from others will produce the final result. So the role of the auditor, in this case the component inspector, is not to check the planning and application of the trade but rather the end result, the component part. But what do we expect in a quality management system audit? At best an auditor can only take a very small sample of a QMS and make a judgement on its effectiveness. Sometimes this is not even one percent of the overall system. So this is like checking five parts of a five hundred-part tool and making a judgement that the tool will work. Of course the auditor can check whether the organization's customers are truly satisfied and then make a decision on the real effectiveness of the QMS. We can then apply the same criteria as a tool; it either works or it doesn't.



The role of the quality professional

There are no conclusive criteria to be found in the various service or manufacturing sectors or academia as to the key attributes of a Quality professional. Particularly you will observe in the various debates you can find on “Linked In” that the requirements of the quality professional range from a policeman, bureaucratic nuisance or necessary evil to someone that relishes stifling creativity. Maybe the problem is similar to that of the toolmaker. The really good ones go totally unnoticed because if they do their job well then no one remembers. We take it for granted that new cars will be launched, new cellular phones or tablets will be produced and new aircraft will take to the air. The craftsmen building the tools, moulds and jigs to manufacture these commodities will forever stay in the background. But if the quality standard falls in the production assembly area or on the service delivery side, the first person to be fired is normally the quality manager. Who said life should be fair?

[back to contents page](#)

The need to drive out fear to improve Quality

by Paul Harding



Deming's 8th Point

The 14 management points of W E Deming are well known, particularly in the quality profession. However, the importance of the 8th of Deming's 14 points *"to drive out fear"* is often underestimated. In order to ensure consistent quality and improved productivity, more attention needs to be given to the 'real' shop floor situation, from the various levels of management. Very often short-term campaigns or restructuring programs designed to increase productivity have the opposite negative effect leading to a deterioration of quality performance. It is necessary, therefore, to remove residual fear from any organisation to achieve the quality and productivity improvements required. W E Deming states, *"No one can put in his best performance unless he feels secure. Secure means without fear, not afraid to express ideas, not afraid to ask questions. Fear takes on many faces. A common denominator of fear in any form, anywhere, is loss from impaired performance and padded figures."* It is important for management to focus more on the shop floor activities reduce this fear factor and ensure that quality data is not being padded as suggested by Deming.

The need to drive out fear

The Globalisation of industry has brought with it the need to achieve more stringent benchmark results relating to quality and productivity. This activity, however, has also brought some problems to industry. A perception at shop floor level has developed that headcount reductions are the focus of any Globalisation or improvement programme and the motivation of the workforce does not appear to be initially considered. If we look at Japanese culture, we see a different picture. Many Japanese companies accept rationalisation as a necessary development for the future survival of the global business. Melnyk and Denzler speak of the many older Japanese

executives who recall the harsh conditions of the post World War Two era. Those conditions spawned social contracts based on corporate unions' acceptance that worker's wages depended on the wellbeing of the firm. The ex-Nissan UK Human Resource Director Peter Wickens talks about the Japanese worker who accepts that it is sometimes necessary for him to be moved within his company or to a subsidiary and that such moves are necessary to meet a changing economic or market situation. It is, therefore, not always simple to compare productivity metrics without taking a holistic view of the culture of the organisations that are being used as the benchmark. Deming acknowledged this type of scenario and elaborated on his reason for driving out fear when he stated some actual expressions of fear as follows:

- *I am afraid I may lose my job because the company will go out of business.*
- *If I did what is best for the company, long term, I'd have to shut down production for a while for repairs and overhaul. My daily report on production would take a nosedive and I'd be out of a job.*
- *My boss believes in fear. How can he manage his people if they don't hold him in awe? Management is punitive.*
- *I'd like to understand better the reasons for some of the company's procedures, but I don't dare to ask about them.*
- *We mistrust the management. We can't believe their answers when we ask why we do it this way. The management has a reason, but they don't tell us.*
- *I don't have time to take a careful look at my work. I must turn this job out and start on another one (engineer).*

A lot of the above statements quoted from Deming are closely related to some typical reactions from South Africans that have also been affected by re-alignment or productivity improvement programs.

Creating the suitable atmosphere to make the quality gains

The foundation of any improvement program should be to first create a suitable atmosphere making the organisation energetic and receptive to change. This supports Deming's belief that an organisation cannot perform at optimum levels when fear exists. Seen from a Japanese perspective, organizations should look at the following principles:

- Enrich meetings between Company and Union.
- Consult a specialist about the labour problems.
- Educate and train the Manager and Foreman about the correct way of Industrial relations.
- Inform the workforce of any new company plan and

...continue on page 5

events through open communication and aim to enhance the realisation of operators.

- Respect the position of shop steward.

The fourth point made about sharing information is an important part of the Japanese culture. Wickens discussed the importance of communication and stated, *“Nissan managers at NMUK developed a philosophy statement aimed at building an effective company in which all are working towards the same aims and objectives.”* The philosophy statement includes:

- We will develop and expand the contribution of all staff by strongly emphasising training and the expansion of everyone's capabilities.
- We seek to delegate and involve staff in discussion and decision making, particularly in those areas in which they can effectively contribute so that all may participate in the effective running of NMUK.
- Within the bounds of commercial confidentiality, we would like everyone to know what is happening in our company, how we are performing and what we plan.
- We want information and views to flow freely upward, downward and across our company.



Wickens went on to say that in Nissan UK, *“if there is one aspect to be singled out as important in team building and commitment, it is the five-minute meeting at the start of day. These talks are frequently about quality, but they are also used to discuss schedule changes, work redistribution, process changes or training. Most of the discussion is about matters that will affect the team in their daily work.”* In South Africa we must recognise the importance of communicating concerns of mutual interest, particularly on quality. Organizations must be careful, however, that communication sessions do not develop a reputation as a forum for criticism. Any such communication sessions must be focused on specific process improvement plans.

The need for a culture change

In order to gain long term benefit from any improvement program or re-alignment of the organisation it is necessary to work on a culture change. Barrie Dale discusses the introduction of a Total Quality Management programme and says, *“the change of culture must be planned to avoid ambiguity and facilitate improvement and that managers must learn to lead change.”* He says *“culture change must be recognised as ongoing, rather than the prerequisite for TQM”*.

According to Deming, after transformation the manager of people will have the following roles.

- Managers understand and convey the meaning of a system.
- Helps people to see themselves as components of the system.
- Recognises and accommodates individual differences.
- Encourages people to study and to grow.
- Are a coach and counsel and not a judge.
- Understands the interaction between people and circumstances that they work in. Recognises that workers that can learn a skill will come to a stable state – upon which further lessons will not bring improvement of performance.
- Have three sources of power.
 - Authority of office (Positional power)
 - Knowledge
 - Personality and persuasive power (Personal power)
- Will study results with the aim to improve performance as manager of people.
- Will try to discover whom if anybody is outside the system, in need of help.
- Creates an environment that encourages trust (freedom and innovation).
- Does not expect perfection.
- Listens and learns without passing judgement on those that have spoken.
- Hold spontaneous meetings (at least once per year) with all subordinates to establish their aims, hopes and fears.
- Understands the benefits of and losses from competition between people and between groups.



The Japanese have an activity referred to as Top Shindan audits. This activity is able to assess the feeling of senior management as well as subordinates and how well they were progressing with the implementation of improvement activities. Japanese executives performing these audits show most of the characteristics as displayed in Deming's points a-n shown above. These regular audits not only give the opportunity to assess progress of targets but also to gain a feeling of the morale of the workforce.

...continue on page 6



Deming's 5th Point

Deming said in the 5th of his 14 points, *“Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.”* In his elaboration of this point Deming speaks about the improvement of the process including better allocation of human effort. *“It includes selection of people, their placement, their training, to give everyone, including production workers, a chance to advance their learning and to contribute the best of their talents. It means removal of barriers to pride of workmanship both for production workers and for management and engineers.”*



Involve the team

It is necessary to involve all the support areas that are involved with the monitoring and support of each process as well as the production superintendent and managers supervising the process. Various enquiry methods and frameworks can be used daily to monitor quality and productivity performance. A lot of technology may be used to create reports or conduct analysis and much data can be made available. Senior management need to become more efficient at analysing information. Spreadsheets need to be produced faster and faster and information distributed even quicker through the Internet and Intranet to ensure that quality information is relevant. However, the foreman and operators must not become isolated in the information technology age, which is being embraced by Management and Engineers.



Conclusion

Human issues need to receive more attention regarding any underlying fear recognised in the organisation if higher quality and productivity targets are to be set and met. Management should look to capitalize on the teachings of W E Deming if they want to consistently seek improved quality and productivity results. The importance of Deming's 8th point of driving out fear should never be underestimated.

Appendix: Deming's 14 Points

- 1 Create constancy of purpose for continual improvement of product and service.
- 2 Adopt the new philosophy for economic stability.
- 3 Cease dependency on inspection to achieve quality.
- 4 End the practice of awarding business on price tag alone.
- 5 Improve constantly and forever the system of production and service.
- 6 Institute training on the job.
- 7 Adopt and institute modern methods of supervision and leadership.
- 8 Drive out fear
- 9 Break down barriers between departments and individuals.
- 10 Eliminate the use of slogans, posters, and exhortations.
- 11 Eliminate work standards and numerical quotas..
- 12 Remove barriers that rob the hourly worker of the right to pride in workmanship.
- 13 Institute a vigorous program of education and retraining.
- 14 Define top management's permanent commitment to ever-improving quality and productivity.



[back to contents page](#)

Top Shindan Audits

A Revolution in Top Management Commitment

by Paul Harding

Since it was first published in 1987 one hundred and ninety-five countries have received ISO 9001 certificates. One major change to the original International Standard, is that of ensuring Top Management commitment to the development and implementation of the quality management system and to the continual improvement of its effectiveness. This article describes a Japanese methodology referred to as Top Shindan where the senior executive of the organisation audits the company performance relating to Quality, Delivery and Cost against set targets and activity plans. A support methodology referred to as Hoshin Kanri is also discussed as an efficient method of cascading policies and objectives to lower levels in the organisation and obtaining harmony across functions. It is suggested that these methodologies, currently used in Nissan South Africa, will assist organisations in satisfying the revised ISO 9001 requirement. A connection between these methodologies and some of Deming's fourteen management principles is also made.



Introduction

In 1999 a Japanese Executive Vice President (EVP) was appointed at Nissan South Africa (NSA) and with this appointment came a revised approach to top management's understanding and commitment towards both shop floor and middle management's ongoing Quality and Productivity improvement activities. This improved understanding came about by using the auditing method referred to as Top Shindan. This approach relied on the monitoring of, and the continuous improvement to, quality and productivity results using a Japanese methodology referred to as Hoshin Kanri, the literal translation of which is Direction Management or Deployment. This Hoshin Kanri process takes broad Company goals and objectives and then breaks them down into individual targets

that are cascaded down to various levels in the organisation. Each target is governed by a series of control items that are applied through a detailed activity plan. Both Japanese methodologies have a large significance on the understanding and application of the requirement indicated in the ISO 9001 Quality management systems Standard. In the current standard there is a far stronger requirement that Top Management show commitment to the quality process and that there is an ongoing continual improvement activity to improve the effectiveness of the system.

The Role of Executive Management

Clemson [1] states *"The characteristics of the manager obviously influence the organisation being managed"*. He goes on to say, *"Managers have a choice in how they choose to perceive their organisations and in what they choose to perceive about those organisations."* This approach to management manifested itself in NSA in different ways since the Japanese took over. Previously the Executive, up until the appointment of a new Japanese EVP in 1999, were not always able to evaluate whether data presented at various operations meetings reflected the true situation in the organisation. Often the data presented was distorted or misreported. The new Japanese Executive paid much more attention to operating detail and wanted to see actual results and more significant data, even if it were not as predicted or desired. This revised approach is compatible with the quality management principles discussed by Deming [2] and supports the eighth of his fourteen points for management of *"Driving out Fear."* A climate of freedom to act without fear is critical if an organisation is to create the suitable atmosphere to improve Quality performance levels as described in the revised ISO 9001 Quality Standard. By driving out fear, the data presented at each Executive Operations meeting at NSA and the subsequent questions asked in terms of Quality, Delivery and Cost issues could be more supportive of the improvement goals set by the organisation.

The role of Top Shindan audits

One of the first major changes in approach to management that came from the new EVP was to introduce the concept of Top Shindan into NSA. The literal translation of this term from the Japanese is *"Top Executive Diagnosis (TED)"* A clearer definition of these diagnostic audits is given below.

- Top Shindan is defined as a detailed diagnosis following an audit performed to obtain an overview of each activity

...continue on page 8

that is supporting the Company's stated goals and objectives.

- The senior executive of the Company always conducts the audit and follow up diagnosis, which is focused on an individual's function and proposed improvement activity.
- The diagnosis is based on the ongoing review of the level of actual achievement of targets by an improved activity against the Company's agreed Business Plan.
- The audit and diagnosis can be conducted at any level in the organisation where an activity supporting the Business Plan takes place.
- The audit is not restricted to the Quality Management System, it can also cover all aspects of an Integrated Management System.

The EVP of Nissan conducted audits at each department to understand personally what performance level was being achieved. These audits did not appear to be formally structured as described in the requirement for internal audit found in the ISO 9001 Quality Management Standard. There was no formal check list or report back format that was used by the EVP. At first it appeared as though these audits were very informal and impromptu, but it soon became apparent that they were part of a broader plan. Each division would be scheduled for an audit based on the current level of performance and the impact on the Company targeted goals. In the first twelve-month period a total of fifty audits and subsequent diagnosis were scheduled and conducted. The aim of each audit was to monitor performance results following improvements to the system of production and service areas that were supporting production. Each level of management and supervision was then interviewed by the EVP and the activities that supported each business plan item were assessed for relevance and accomplishment. This seemed to support Deming's fifth point of *"improving constantly and forever the system of production and service"*. It was up to each individual being audited to state their improvement activity and listen to advice given and then act upon that advice in order to achieve improved results. There was no direct criticism, only comments on improvement opportunities. If an area had been seen to be successful the EVP would comment that the performance to date was "very good"

Effect of restructuring Top Management meetings

The new EVP also decided to restructure the Operations meetings at NSA to focus more on actual improvement activities and this had an immediate effect on the feedback of the business performance. The focus of action was now turned to actual results emanating from improvement activities which each divisional head had to explain to the meeting attendees in detail. If the divisional Head did not have the full understanding of the specific activity, the relevant manager or engineer would be called upon to explain the detail. This activity brought a number of benefits to the meetings including a way of *"defining top management's commitment to ever-improving quality and productivity"* which is the fourteenth of the Deming points on improving management and is now alluded to in ISO 9001 In order for top management to be able to report on the real issue, presenting the real data at the operations meeting, they had to

become far more involved with the actual day to day activity through observing and understanding the process. The EVP had a very good in depth knowledge of each process through his many Top Shindan audits and was able to ask searching questions to establish the understanding of each senior executive of the actual performance criteria and result. This feedback and debate on the real issues created a more open discussion and over a period of time reduced the fear factor that had been previously present in these meetings. If a target was not met according to the data being presented, the EVP would openly discuss the issue and either suggest an alternate action or ask for other opinions to address the concern and not the individual presenting it. In the early stages of this new format there was some resistance to the new approach but over time this method became the accepted normal activity. A paradigm had now been changed and a new paradigm was emerging.

The need to focus on consistency

One of the expected outcomes of the Top Shindan audit is to ensure that there is an alignment of activities in the cascading of Company objectives and operating methods. Although Deming refers to *Constancy of Purpose*, in terms of a single focused objective, it is an important part of the Japanese management approach to be consistent in the application of each task allocated. Wheeler [3] states that *"it is difficult to improve a process that is out of control, so therefore, any variation in a process needs to be limited"*. The first objective in limiting variation is to focus on the consistency of the task being performed. The first step to meet this objective may be achieved using the ISO 9001 Standard as a tool to standardise the process through the development of procedures or work instructions. The degree of documentation developed is dependent on the nature of the task and the skill and experience of the person performing the task. This is why the Japanese spend a lot of time and effort evaluating the magnitude of the task as well as the skill level of the operator performing that task. At the higher level in the organisation consistency comes through the development of the Hoshin Kanri activity explained earlier. This methodology is aimed at being consistent in target setting and achievement, not just in the magnitude of the target set but in the overall relevance of the target to the organisation's goals. Nissan Motors Limited of Japan (NML) have created a management systems framework referred to as the Nissan Plant Management System (NPMS). This framework prescribes an approach to achieve quality and productivity improvements by consistently utilising various benchmark standard practices developed by Japanese engineers. Constancy of Purpose at NSA can therefore be summarised as a focused approach by all levels in the company to bring the operating system under control by the application of the standard way of daily management. Once under control the Hoshin Kanri methodology can be used to gain the improvements necessary to remain competitive, which satisfies the Improvement clause in the ISO 9001 Standard. The Top Shindan audit can then be used to monitor improvements and ensure business plan targets are met on time. At shop floor level, once the operating system is under control, improvements to the process can be made through the Kaizen activities or gradual small improvement steps as described by Imai [4]. The

...continue on page 9

overall purpose of the Top Shindan audit is then to confirm the current status of the Hoshin Kanri objective / methodology achievement and to check appropriateness of individual objectives and methodologies to the company broad objectives and to gain the required support from the lower levels of supervision. Specific managerial skills such as active listening, questioning, probing and coaching are crucial to the auditor in striving for common understanding and facilitating the achievement of the Hoshin Kanri objectives and methodologies.

Lack of trust between management and workforce

Deming identified fear as a major obstacle to improved efficiency and effectiveness and a major barrier to change and survival. Although Deming focused his ideology on the shop floor, the same fear can manifest itself in senior management. Fear affects an operations Management system in many ways. People are afraid to ask questions and reveal weaknesses in their knowledge; others fear co-operating because it may lead to failure, such as poor performance reviews or even termination of employment thus preventing them from challenging current practices or trying new techniques. The foundation of the NPMS management systems framework states that it is essential to establish the suitable atmosphere, making the organisation energetic. This implies that fear must first be driven out of the organisation. This is not so easy because many employees simply fear change because it forces them to deal with new and unfamiliar methods in place of known and comfortable, if inefficient, methods. This idea of fear linked to respect seems to manifest itself in South African management and has nurtured a lack of trust. The foreman is often reluctant to be seen to be part of the improvement process, as this would label him as part of the "management regime" by the workforce. This makes it difficult for the foreman to perform the same role as the foreman in Japan, which is more of a coach and mentor rather than a pure supervisor.

The Japanese management culture

The Japanese management advisors at Nissan South Africa prefer to say that to drive out fear, managers must create an environment that encourages people to ask questions, report problems, and try new ideas through Kaizen improvement, as proposed by Imai. They say employees must know that the organisation will not punish them if new ideas fail. Managers must demonstrate the importance of trying something new that offers a chance for a major leap in effectiveness rather than sticking with safe methods that offer only stable or declining benefits. Top Shindan audit has, therefore also become a tool with which Top Management can create an atmosphere of trust. In the quest to achieve Quality and Productivity levels that are compatible with Japanese and other overseas assembly plants in terms of International Benchmarks, the drive to improve can be self-motivated at each level in the organisation.

The sharing of knowledge

Deming's Theory of Profound Knowledge indicates that the transformation of management comes from the understanding

of the System of Profound Knowledge. *"The individual transformed will perceive new meaning to his life, to events, to numbers, to interactions with people."* Knowledge must then be harnessed at shop floor level in order to ensure that the organisation can grow to its full potential. The Quality and Productivity improvement programme at NSA has attempted to improve shop floor performance through sharing a greater amount of knowledge to each foreman by use of training materials and by access to the numerous Japanese Benchmark Standards. Deming implied that this knowledge must be allowed to manifest itself for the wellbeing of the organisation. This also implies the need to develop a suitable culture for improvement that can be shared across all levels and all functions within the global corporate environment. The EVP ensured that as much appropriate knowledge as possible was passed on to everyone being audited through his Top Shindan activity feedback. This combined audit and interview drive was intended not just for knowledge sharing but to motivate everyone for success. The Engineers in Japan had developed an institutional knowledge base, which was created through people networking and sharing knowledge with each other. The improved processes thus embedded in their organisations could then be verified for effectiveness by Top Shindan audit and diagnosis.

The role of facilitation to create harmony.

For Hoshin Kanri to be able to operate as an effective management tool there must be a harmonious approach by all functions to achieving the Company objectives. A balance is therefore necessary to ensure that system changes brought about in order to cater for the dynamic needs of the individual must be tuned to the requirements of the customer and the broad needs of the system. Intelligence reports from each area are therefore essential and each activity must have some degree of control to ensure that the whole group benefits from individual activities. Top Shindan is a means to gather that intelligence first hand. There is a current fear in the minds of senior management that many of the current changes initiated through Japan are too radical. The Japanese, however, take a different view and look at the whole system and rely on the individual management to ensure a harmonious approach to productivity improvement. So, facilitation across functions must be extended to the way the system is modified through each activity update set to improve the bottom line result. Corrective and preventive actions to non-conformance to the system can then be determined which can be implemented in such a way as to keep the goals and objectives of all the functions viable and still meet the collective targets of the organisation.

The importance of Deming's first point

The first of Deming's fourteen points says: *"Create constancy of purpose for continual improvement of product and service."* In essence this is what ISO 9001 Quality management system Requirement should be focused on achieving. Deming's initial point calls for long-term thinking and planning by managers at all levels to promote a clear vision of the organisation, its customers, its method for delivering value to its customers and the role of quality in that method. Managers must also ensure

...continue on page 10

that employees understand this vision and move continuously toward it. The ISO 9001 Quality management system Standard linked to a Hoshin Kanri policy deployment process would be able to give a clear indication of objectives and measures to cover this, the first of Deming's 14 points. This point also calls for harmony in that everyone must share the constancy of purpose across the organisation. Finally, this point calls for managers to focus attention sharply on long term efforts to reduce unnecessary variance in their operations Management system. This reduction in variance is catered for in the call for the consistent application of the ISO 9001 Standard. Top Shindan audits focus on this constancy of purpose by comparing improved methods and results across functional barriers and determining whether they are focused on the broad company objectives.



Redefining Top Management

The Top Shindan approach discussed in this article has redefined Top Management's role at NSA particularly with respect to people issues. Wild [5] researched one hundred and twenty three recognised world experts for their opinions on the art of management. Wild in his introduction stated that many of the contributors tend, explicitly or implicitly, to see management as being in part or wholly to do with people. There have been many other views of what can be defined as management practice. Mintzberg [6] states *"The integrated job of managing has been lost in the conventional way of describing it."* It can be said that like a 'systems model', the role of the manager has to be seen holistically and not broken down into individual segments. Mintzberg talks about the person in the job. He describes the manager as a person with values that have probably been set through experiences and competencies that have been acquired through knowledge and converted into a set of mental models. The person depicted by Mintzberg can be embedded in each job in order to perform managerial work. He goes on to say *"Embed the person depicted in each managerial job and you get managerial work. At the core of it is some kind of frame for the job, the mental set the incumbent assumes to carry it out."* What Mintzberg is saying is supporting the Theory of Profound Knowledge, as stated by Deming in his framework of four key principles consisting of applied management, influenced by our mental models, which have been developed through learning applied to our systems thinking. The model described is very much influenced by the mental model that has been shaped by individual experiences. The new EVP brought to NSA his own mental model linked to his own experiences gleaned in Japan. Previous top management of NSA had their mental models based on years of experience working in a South African

environment. Revans [7] suggests that there is a scientific method available for management. He states, *"Between science, on the one hand, and technology on the other, there is a simple and legitimate parallel that not only offers us an exercise in metaphysics, but also suggests a development of management theory."*

The five steps of his management strategy then become:

- observations on the field – or the determination of what needs exist and what artefacts have already been produced to fulfil those needs (survey);
- the formulation of theories based upon these observations – or decisions about what further or different artefacts to produce (policy);
- the design and conduct of experiments to test these theories – or the establishment of methods of manufacture (operations);
- the comparison of experimental results with those predicted by these theories – or processes of audit (inspection); and
- the rejection, modification or confirmation of these theories in accordance.

Top Management is using this applied management at NSA through the application of the Top Shindan audit that is supported by observations carried out. The five steps Revans advocated for management strategies have been put in use through the application and development of a Hoshin Kanri improvement framework. This Framework is also supported by the International ISO 9001 [Quality management system Requirements.

Conclusion

Top Shindan appears to support not only Deming's principles of management improvement but can also expand many of the basic requirements of the ISO 9001 Quality Management Systems: Requirements Standard to make them more effective. These audits have also focused the organisation on a common goal through creating a harmonious approach to Quality and Productivity improvement. Results obtained at the Nissan Manufacturing Company in South Africa, following the introduction of this new methodology, have indicated that the approach has been successful. Quality levels have become comparable with other overseas Nissan operations in Taiwan, Thailand and Malaysia and cost performance is starting to challenge the benchmarks of UK, North America and Mexico.

References

- [1] Clemson Dr. B (1984) Cybernetics, A New Management Tool, Abacus Press
- [2] Deming, W. Edwards (1982) Out of Crisis, Cambridge University press
- [3] Wheeler Donald J (1993) Understanding Variation. The key to Managing Chaos. SPC Press
- [4] Imai Masaaki (1986) Kaizen, McGraw-Hill.
- [5] Wild Ray (1982) How to Manage. 123 world experts analyse the art of Management, William Heinemann.
- [6] Mintzberg H (1994) Sloan Management Review / Fall edition
- [7] Revans R (1987) The Learning Equation. Extract from Action Learning, Vol. 6 No. 2, Mumford

[back to contents page](#)

Why don't people want to perform menial tasks?

by Paul Harding

I recently posted a short piece on the Linked In Pulse platform about people being reluctant to carry out “menial” tasks. In other words “Why don't people want to get their hands dirty?” I was intrigued by the follow up to this small article and its particular association with today's Leadership issues so I would like to expand on that post.

Background

When I was in my early twenties I attended a voluntary youth camp in Ireland just outside of Dublin. The camp was celebrating 50 years since the founding of this particular youth organisation in my home town of Birmingham. As a gesture, the original founder of this particular youth organization was invited to the camp as the honorary Camp Commandant. We were pleased when the founder accepted our invitation as he was a very busy man. He was not only a High Court Judge in the UK but he was also a Queen's Councillor, giving advice to the Queen of England. He had also been knighted for services to his country.

The event

Anyone who has been involved with running these sort of camps or in fact any voluntary youth service knows that a great deal of preparation and organization is involved. It is just like running any business. Standards and procedures need to be put in place, although not necessarily written down, and responsibilities and authorities need to be allocated. Of course the big difference is that these events are voluntary with no payment for services rendered. In fact the youth leaders pay for all their own expenses and very often subsidise the youth attending the camp. One of my particular tasks at the camp was referred to as the “Lines Officer”. This meant that it was my duty to ensure that the tents were looked after and ropes were at the correct tension and daily inspections were carried out. One of the less glamorous tasks was to make sure that the latrines were in good order and hygienic. With no running water or flush toilets at these camps, the ablutions were a hole in the ground with a bucket seat and a canvas screen. However, these facilities were more than adequate in terms of “Fitness for use”.

At the end of my first day at the camp I went to the top of the field that we were camping in to perform my allocated task of maintaining the “Lats”. To my surprise someone had already beaten me to it and was pouring chemicals down each of the pits. I shone my torch into the face of this unknown person only to find that it was the Camp Commandant. In a state of shock I immediately spoke to the CC and said “Skipper, a man of your stature shouldn't be performing such a menial task”. Now although this man was indeed a “Sir” in the formal sense of the word he preferred to be called “Skipper”. He then replied “**Boy,**

never ask anyone to complete a task that you are not prepared to do yourself”.

Lessons learned

Those words have stayed with me all the way through my career development moving from the shop floor eventually into executive management. When I first started work as an apprentice toolmaker I knew that I had to clean the machines, make the tea and wash up. This was a small payment for being mentored and trained to become an efficient and effective toolmaker one day. When I eventually moved into management I had not at that stage attended any management training courses but I knew that if I wanted to get respect from the workforce I had to earn it.

One of my first challenges as a manager was when I had to attend an executive meeting to determine if a set of press tools that would normally take 20 weeks to complete could in fact be completed in just 9 weeks due to an oversight in placing an order. My answer to the executive team was “I cannot make that decision; I will have to consult with the workforce.” The reply came back from the executives; “Are we talking to the right man here?”

“Yes,” I replied, “but this man will not have to make the tools someone else will be doing that.”

The bottom line was that after consultation with the workforce and developing a unique project plan based on simultaneous engineering, not heard of at the time, the tools were finished one week ahead of schedule in just 8 weeks. Of course we had to break all the conventional rules of normal contract negotiation and work on a basis of trust between the customer and the supplier. By consulting with the workforce the project turned into a challenge rather than just a normal job. I had the honour to be given the task of painting the finalised tools in our corporate colours and attaching our Company's nameplate to them.

Continuing the journey

Some years later I started in a new position as the General Manager of tooling production in a new country. On my first day I was confronted by a delegation of young design engineers who said that they had a major problem and that they needed my intervention. The major problem turned out to be that during the installation of some new lighting over the weekend in the engineering office some sawdust was still laying on the drawing boards and floor. Of course the sawdust would normally be removed by the “cleaner” but I was told the cleaner was absent. I still had difficulty understanding what the problem was that

...continue on page 12

needed the attention of the new General Manager. It finally dawned on me that cleaning up sawdust was below the perceived status of a design engineer. I immediately located a pan and brush and started to clean up the office. Within less than a minute someone grabbed the brush and pan from me and finished off the job. Why, I wondered, did someone not take this course of action in the first place?

Never ask anyone to do a job that you are not prepared to do yourself.

Strategy vs. Operations

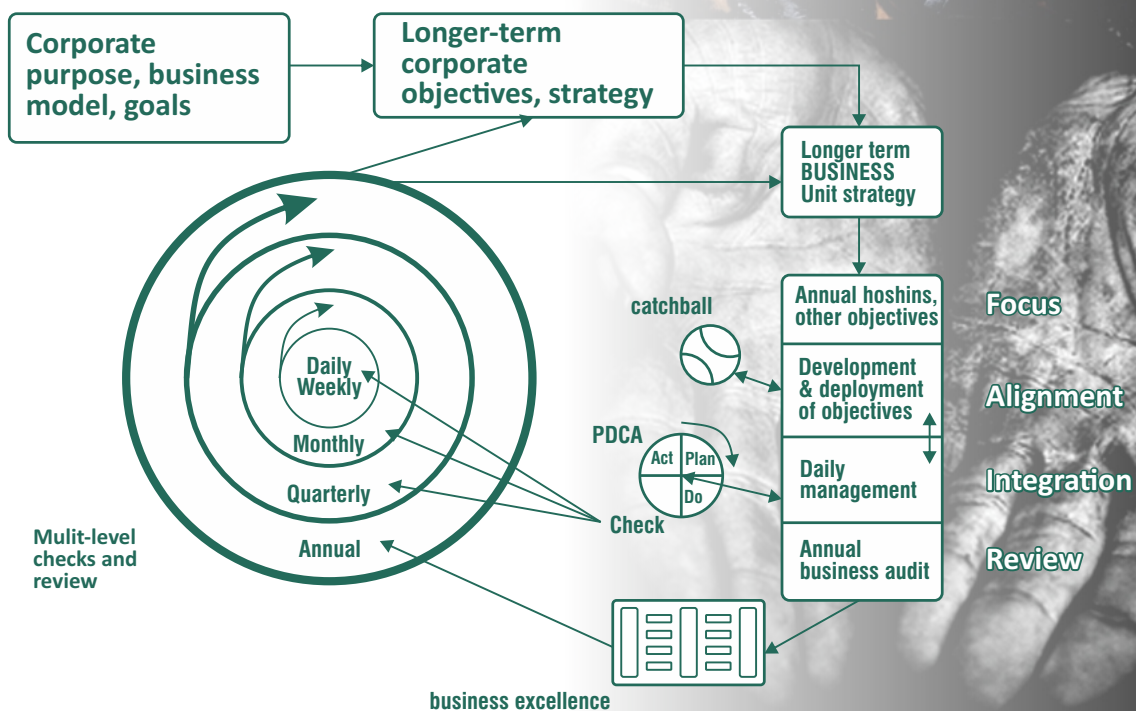
This phenomenon is not just restricted to cleaning latrines or cleaning up sawdust. I have been disappointed in my later business life that many executives have an aversion to finding out what exactly goes on at shop floor or office level. Many strategic decisions are made and objectives are set in the boardroom with no idea as to how the organisation functions on a day to day basis and how these objectives could be met. It would have been easy for me to set a target of making a set of tools in 9 weeks but I knew that this had never been done before. I knew the constraints but I also knew that a lot of the constraints could be removed but only through management intervention. Deming was well aware of this fact when he reminded us that around 85% of all problems are management related.

The figure below, developed by the Business School of the University of East Anglia, shows the relationship between strategy and operations. It is the alignment and integration of daily management activities, what is happening at the coal face that will determine if corporate objectives will be met. The feedback loops should give an early warning if things are going wrong. Good leaders don't just wait for the annual feedback; they are involved with monthly and even the daily or weekly feedback meetings.

This reminded me of another incident where the President of a global organization I was working for was visiting our local operation. The local executive management had set up all sorts of visual management boards explaining complex 6 Sigma and Lean improvement programs with the projected cost savings. The Global President walked past all these boards and went straight to the production foreman and chatted to him about his daily management shop floor targets and challenges. He spent 15 minutes with the foreman, much to the annoyance of the local executives, going through improvement activities and corrective actions put in place to meet the targets. Now that is what leadership is all about, although the President had set stretch improvement targets at corporate level he wasn't going to be impressed with rehearsed feedback, he wanted to know how the targets were being challenged on the shop floor.

Conclusion

There are many books written on the theory of leadership and I don't profess to know all the answers. What I do know, however, is that if a High Court judge can clean a latrine and a President of a global organisation can hold a conversation with a foreman to discuss targets then who are we to say that any trivial job is below our stations in life?



[back to contents page](#)

Working in Silos

by Paul Harding

I remember when our first Japanese CEO came to our plant in South Africa. He immediately gave up his fancy office and converted it to a training / meeting room. He then took up a desk alongside the production managers in an open plan office. This was not just a token move; it was a clear message that he needed to communicate directly with his managers and understand what was happening in the sharp end of the organization. This of course is not unusual in Japanese style management.

Historically each manager had their own separate office and each director sat in a plush suite in the main administration building. All the executives and managers were focused on their lines of responsibility in their functions in order to meet their targets and Key Performance Indicators. This was typical of an organization that works in silos and does not fully communicate. The role of the CEO was to sit at the top of the hierarchy and give commands.

Below you will see an illustration of a model that depicts a typical manufacturing organization. Each department or function is illustrated by a small triangle. Does it look familiar? Probably each of these functions had a manager who sat in his office and focused only on what objectives he had been told to achieve.



If we look at the figure above, we see the triangles that indicate various functions within an organization.

Count the number of triangles that you can see in the figure.

Look carefully before you come to your conclusion. Each of these functions has a role to play in the success of the operation. No doubt each of these areas has a list of policies, procedures or work instructions supported by job descriptions relating to what must be done in each department.

The figure shown is manufacturing based, but it could also apply

to any service organization as well with a couple of minor modifications. So, what we are looking at is a process-based organization that may be working in silos with little team work or communication across functions.

How many triangles did you count?

One of the simpler definitions of systems thinking is that “The whole is greater than the sum of its individual parts”. So how can we achieve this in our illustration?

Let's start with the 4 triangles at the top of the model. We have a CEO, Business planning function, Finance and Logistics. Now of course if we want to implement a strategic plan for the organization, we need input from each of these 4 functions. So, we have now created a larger triangle that incorporates all these functions. However, we haven't produced anything yet. So, let's look at the logistics function as the top of another 4 triangles and incorporate Production, Quality and Research and Development. Do we need further input in order to achieve success? Well how about including Training, Customer service, Information technology, Sales and an Audit function. Now add all these nine functions together and you now have a bigger triangle.

Get the picture?

Now go back and count the triangles all over again and see how many you can find this time? Of course, this is a lot of theory about systems thinking but does it really work?

Well, what our Japanese CEO did was to form Cross Functional Teams (CFTs) that needed to cooperate in order to meet the organization's objectives. So, although each of the divisional managers had their functional KPI's they were also allocated CFT KPI's too. So, the Production manager had a CFT KPI for achieving Quality targets as well as his allocated volume targets. This had a very positive impact. Previously the production manager was quite happy to allow defective parts through the system in order to reach his volume KPI. However, now he had to pay far more attention to the quality of his product and ensure his processes were under control.

So, we have 16 small triangles in the model. There is also a large triangle surrounding the model that can be depicted as the organization itself. These 17 triangles can be indicated as the sum of the individual parts. However, the organization can be much stronger if the whole is greater than the sum of the individual parts. So now add all the triangles in the model.

Who counted 27 triangles? Well done. Now apply it to your organization

[back to contents page](#)

Quality in Schools

Many of our readers are parents themselves or interact often with children. We have asked our education editor, a retired headmaster, to share thoughts on how to get Quality principles and practices instilled in young people.

By Dr Richard Hayward

SEL has no 'sell-by' date



Much of what we learn at school is forgotten. Think of certain subjects that you did at school and how hard you studied them for the exams. Once the exams were over, you forgot most of what you crammed into your brain. Yet there were also those things learnt at school that you've never forgotten. In fact, often those 'unforgettables' were most likely not on the timetable nor were they formally taught during a lesson. What were those 'unforgettables'?

Those 'unforgettables' of our school days were social and emotional learning skills. We still use them today. Those skills go by the acronym of SEL. The diagram on this page highlights five core areas that comprise SEL. In our interactions with others, we learn how to get along with others. We learn how to control our emotions, how to know right from wrong and a wide range of other skills. The skills help us to interact peacefully – most of the time – with others and be at peace within ourselves.

Although the Covid pandemic has ended in many parts of the world, its' negative consequences are still with us. One area where it is still felt, is in schools. Post-Covid, acceptable classroom behaviour has dropped alarmingly amongst millions of children. Student motivation and academic results levels have declined. Our world is becoming more anti-social. Think of the ever-soaring levels of emotional and physical violence.

In response to Covid, more and more schools are teaching SEL. Schools are encouraging families to become aware of the life-long values of SEL for their children. Three positive results of SEL teaching in schools identified by the state education department in Victoria, Australia are:

- **Positive outcomes for a student's future:** Social emotional strengths can help students to manage stress, decide on goals and

plan for the future. They learn how to make friends and keep them going forward.

- **Positive outcomes for student achievements:** Students are happy at school and have better academic engagement. Exam results improve.
- **Positive outcomes for student mental health:** There is greater resilience to deal with change and unpredictability.

What are easy ways to develop a child's SEL? These five tips deserve a high-five for their effectiveness:

- 1 **Help the child send and receive nonverbal messages:** Social and emotional awareness includes being able to understand body language. A SEL-savvy child accurately reads gestures, facial expressions and posture. It knows, for example, when its' behaviour at the dinner table is acceptable or not. Look at the facial expression of the parents.
- 2 **Make eye-contact and smile:** Encourage the child to make eye contact with the person that they are talking to and do so with a smile. These two skills are the most commonly used traits of well-liked children (Borba 2015: 3).
- 3 **Guess people's emotions:** This can be a game that a child enjoys. Imagine watching a sports game together on TV. When the cricketer smashes the ball out of the stadium or the rugby player kicks the ball neatly between the posts, the camera often pans in on the player's face. What emotions are expressed? The child's ability to accurately express emotions is increased.
- 4 **Teach good listening skills:** There are courtesies involved in being a good listener. Look at the speaker. Show interest. Don't interrupt. Good listening skills help ensure clear understanding of what is being said and avoids misunderstandings.
- 5 **Talk about characters in books, films and live shows:** Discuss the characters responses to situations. How did they express their feelings in what they said or left unsaid. Body language such as biting nails, rolling eyes upwards and outreached arms are part of the emotional language. Help the child accurately interpret them. Obviously, there will be times of different interpretations!

Give the child SEL skills. They're skills that are of life-long value in contrast to some subjects that we had to learn at school. SEL has no 'sell-by' date.

References

Borba, M 2015: 8 ways to build kids' social emotional intelligence. <https://raycenter.wp.drake.edu/2015/05/06/8-ways-to-build-kids-social-emotional-intelligence/>

<https://www.education.vic.gov.au/school/teachers/health/mentalhealth/Pages/socialemotion.aspx>

[back to contents page](#)



SAQI TRAINING PROGRAMME 2023



All courses offered by the South African Quality Institute are presented in association with other course providers and are available to all organisations and individuals. SAQI can assist with the training of a company's workforce and all training packages can be run in-house at cheaper rates to 10 or more delegates. A special discount applies to SAQI members. For more information or to register contact Angel Chiloane on 012 349 5006 or info@saqi.co.za

1. SAQI reserves the right to **change details** of the programme without prior notice.
2. All training takes place at the **SAQI offices** on the CSIR campus in Pretoria.
3. The courses listed below form part of a specific Certificate and **all modules** should be successfully completed to qualify for the Certificate.
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Code	Course	Days	Cost	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
L1	Short courses for Manufacturing			Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
B80	Welding Inspector	2	5980-00				2-3					9-10	
B81	Mechanical Inspector	2	5980-00				4-5					11-12	
L2	Certificate in Quality Control for Manufacturing	10	26,380-00	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
B41	Introduction to Quality Control	2	5980-00	13-14			15-16					16-17	
B90	Introduction to Statistical Techniques	3	7210-00	15-17			17-19					18-20	
B91	Introduction to Statistical Process Control (SPC)	3	7210-00		27-1			5-7					13-15
B79	A3 Problem Solving	2	5980-00		2-3			8-9					16-17
L2	Certificate in Quality Control for Services	9	25,150-00	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
B30	Introduction to Quality Control	2	5980-00		13-14					21-22			
B31	Introduction to Statistical Techniques	3	7210-00		15-17					23-25			
B33	Introduction to Quality Circles	2	5980-00			3-4					12-13		
B34	A3 Problem Solving	2	5980-00			5-6					14-15		
L3	SAQI Certificate in Quality Assurance*	13	33,590-00	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
B48	ISO Requirements 9001:2015	3	7210-00		29-31						20-22		
B24	Knowledge Management	2	5980-00			17-18						2-3	
B16	Internal Quality Auditing	3	7210-00			19-21						4-6	
B92	Advanced Quality Techniques	3	7210-00				8-10					23-25	
B77	Advanced Product Quality Planning (APQP)	2	5980-00				11-12					26-27	
L4	SAQI Certificate in Quality Management*	14	40,840-00	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
B74	Lean for Manufacturing/Service Industries	4	11,450-00				30-2						
B01	Cost of Quality	2	5980-00						20-21				
B93	Policy Deployment (Hoshin Kanri)	2	5980-00							15-16			
B58	Operational Excellence	2	5980-00							17-18			
B38	Development of a QMS	4	11,450-00								5-8		

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[back to contents page](#)

