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# ISO 9001

## special edition.

We continue our series of articles on the proposed changes to ISO 9001 for publication in 201X by focusing on the Process Approach versus the Standard based approach.

Dr. Alastair Walker shares the second of his articles on this subject and talks about the process approach and the evolution of the ISO 9001 Standard. We are also publishing an article by one of our American colleagues who gives his views on the same subject of how the process approach has been often ignored by consultants and certification bodies. Our regular contributor Paul Naysmith also adds to the discussion by citing an example of a spurious QMS manual. We also feature James Harrington's second article on creativity. Does this support the process approach or the standard based approach? You be the judge.

We are also pleased to announce our latest Platinum member of SAQI as the Refraline group of Companies. It is always pleasing to note companies that have been recognized as a leader in promotion of quality through dedicated service and continuous improvement activities.

It is just two months to go before **SAQI's National Quality Week** celebrations start. We have already received lots of feedback from our members on how they are going to celebrate this annual event that's starts on the 11<sup>th</sup> November and runs through to the 15<sup>th</sup> November. If you have something planned to "**Build Quality into our Nation**", send the details to [vanessa@saqi.co.za](mailto:vanessa@saqi.co.za)

**Paul Harding - SAQI MD**



# Refraline becomes latest SAQI Platinum member

By Paul Harding : SAQI MD



## REFRALINE

Group of Companies



**Top: Mr. Manfred Rosch, MD of Refraline Group of Companies receives the official appointment letter of Platinum classification from Paul Harding MD of SAQI at a handover ceremony that took place at Refraline's headquarters in Germiston this month.**

Refraline was established in 1981, and specialises in the installation, repair and maintenance of refractory and corrosion solutions for a wide range of industries including iron and steel, Ferro-alloys, non-ferrous metals, platinum group metals, aluminium, chemical and petrochemical, cement and lime, power generation, mining, paper and pulp, clay brick, glass and ceramics.

With its head office based in Johannesburg, the company employs 400 people and has undertaken numerous prestigious contracts throughout sub-Saharan Africa; including South

Africa, Botswana, Namibia, Lesotho, Swaziland, Mozambique and Mauritius. Projects have also been completed as far afield as Ethiopia, the Middle East and Australia. The company's reputation has been built on its reliability, flexibility and fast response times. Refraline is the founder member of RASA (Refractories Association of South Africa), an organisation that has a keen interest in the skills development of our future refractory installers.

Refraline has grown from strength to strength over the decades, and is today recognized as one of the leading refractory contracting suppliers.

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The company's local capabilities are further strengthened by the fact that it has access to an international pool of expertise through affiliate, BEROA Deutschland – an industry leader in the engineering and installation of refractory material and the construction of industrial chimneys and other tall structures in more than twenty countries across the globe. The group employs more than 2500 professionals on a permanent basis, in conjunction with a variable workforce of up to 3000 specialists' deployed to specific projects.

As a socially responsible corporate citizen, Refraline is committed to legitimate economic empowerment of previously disadvantaged people through their talents, efforts and commitment to success. Refraline has transformed their 100 per cent subsidiary Refraline Natal with the sale of 26 per cent of the issued share capital to a Black controlled company in 2011, in lieu of Broad Based Black Economic Empowerment (BBBEE), and currently holds a Level 4 BBBEE certificate. A total of 10 per cent of the shareholding of Refraline is held by the Refraline Employees Share scheme. Refraline regards training and development of its employees as an integral element, addressing the unequal distribution of skills in the Industry companies in sub-Saharan Africa.

As a certified ISO 9001:2008 company, Refraline provides its customers with the peace of mind that the company is committed to implementing and maintaining the highest standards of business management practices on a consistent and continuous basis.

Refraline's commitment to service excellence is evident in the fact that all key personnel are members of the Institute of Refractories Engineers. Refraline has identified training as a key element in people development and has taken an industry leadership role in developing and training Refractory Installer Learnerships through the national framework, as well as Recognition of Prior Learning (RPL) to qualify their personnel.

### Activities undertaken in the past year

In order to improve quality of own product and service in the community Refraline has produced a new range of materials during the last year and

data sheets for each of the products has been established, this helps customers to understand various applications of its products, ensuring correct installation.

Refraline has established two laboratories for testing of formulations that comply with refractory industry requirements. These laboratories are in the process of being accredited in the next two years. Several of its products have been sent for application trials with world renowned customers such as BHP Billiton, Samancor, Sasol Petrochemical Secunda, Cato Ridge Assmang, and received positive feedback and service contracts.

Refraline has won numerous awards for health and safety from companies such as Chevron, Sasol and Natref. Customer communication reflects that Refraline has continuously exceeded expectations on installation of contracts.

**SAQI congratulates Refraline on meeting the criteria for platinum membership by being a leading example of both applying and sharing quality principles in the development and sustainability of quality in South and Southern Africa.**



# REFRALINE

Group of Companies

# 32

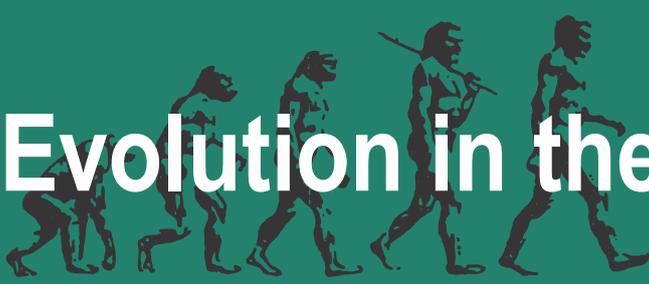


# YEARS

Since 1981

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# Evolution in the process approach



By Dr Alastair Walker : SPI Laboratory (Pty) Ltd, Johannesburg, South Africa

## 1. Introduction

In the first article of this six part series, the evolution of management system standards was explored. This second article looks at the changes taking place to what has become known as 'process approach'. What may appear surprising is that as early as the first edition of ISO 9001, published in 1994, there was a strong focus on processes, with the term 'process' used 15 times, 'processes' appearing 8 times, and 'process capability' appearing 3 times. To be sure, these references were all in the context of the product realisation activities. In this article, this early use of the term 'process' and its derivatives is referred to as the 'process identification phase'. The focus on processes in the context of a management system emerged in the ISO 9001 version published in 2000, and consolidated in the subsequent edition published in 2008. This phase will be referred to as the 'process elaboration phase'. In the new 'high level text' that is the obligatory text for all new and revised management system standards, the overt reference to the 'process approach' has been dropped in favour of the obligation to 'The organization shall establish, implement, maintain and continually improve an XXX management system, including the processes needed and their interactions'. This phase will be referred to as the 'process retreat' phase.

## 2. Phase 1 – Process identification

The references to process in the ISO 9001:1994 version are in the context of very specific obligations. Personnel involved in product development and production had little difficulty in understanding the requirements, provided the context of the standard matched the context of the organization i.e. manufacturing and production activities. Imagine the challenges I had back in 1993 when I had just begun the journey (as leader of a research team in the field of software engineering) in applying ISO 9001 to the conduct of research activities in a university research environment! It is interesting today to look back to see what we made of ISO 9001:1994 Sub-clause 4.9 Process Control. This sub-clause became the basis for the housekeeping arrangements in the post-graduate laboratory!

It was only some years later in 2001 did I eventually manage to reduce the overall academic higher degree process of developing individuals with research potential to a neat process description. It needs to be added that at that time none of the management system auditors who visited us for surveillance audits had much to offer us in terms of interpreting the sub-clause requirements to our post-

graduate educational context – a situation which I suspect would largely still be true today.

## 3. Phase 2 – Process elaboration

The sea-change that took place in the ISO 9001 standard in transitioning from the 1994 to the 2000 version was the change in terminology – 'quality system' in the 1994 version morphed into 'quality management system'. Whereas the 'quality system' was clearly subservient to the goal of the product realization processes in the 1994 version, the tables were turned in the 2000 version. In the 2000 version, the QMS became the prime object of focus, and product realization processes were relegated to simply appearing as an element in the larger system. The 'process approach' also merged as a key new term in the 2000 version, carrying with it the requirement that all processes in the organization needed to be identified.

With reference to my example above of applying ISO 9001 to a university post graduate research laboratory situation, the change in emphasis from 'quality system' to 'quality management system' did nothing to render the standard more appropriate for our use. The terminology of the standard remained inaccessible for most of my academic colleagues.



## 4. Phase 3 – Process retreat

Is the process approach in 'retreat'? It appears so. The term 'process approach' no longer appears in the High Level Text. An interesting test case is ISO 27001 (Information security management systems – Requirements) since it has just completed the journey of conforming to the new HLT requirements. There are references to 'process' but not to the 'process approach'. The standard in the ISO 27000 series that provides guidance for the implementation of an ISMS (i.e. ISO 27003:2010) makes no mention of the

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process approach. Other standards that provide guidance for the implementation of an associated management system (e.g. ISO 20000-5 (Service management – Part 5: An exemplar implementation plan for ISO/IEC 20000-1:2011)) also makes no reference to the process approach. ISO 9001 alone, it appears, is taking further steps to enhance the process approach by adding further criteria in the new version under development. Section 4.4.2 now has 10 requirements for establishing processes, in contrast to the 6 points in sub-clause 4.1 in the current edition.

## 5. Discussion

### 5.1 The fruit of a 20 year journey

Perhaps it is now time to take a step backwards, as it were, to see if the journey from ISO 9001:1994 to the emerging ISO 9001:201X is likely to produce the expected benefits. In summary:

The 1994 version had a strong focus on the product realisation processes. The references to 'process capability' were readily understood in terms of the production of tangible goods. The elements of the management system were visible in terms of required procedures for management review, audits, correction and preventive action, and improvement. But the user of the standard could not mistake the primary focus of the standard i.e. processes that delivered products and to a lesser extent, services.

By contrast, in the emerging 201X version, the focus now embraces all activities in the scope of the 'quality management system'. The term 'process capability' has disappeared, possibly because it would sit uncomfortably in the context of, generally speaking, low capability processes outside of product realisation. After all, who is likely to measure the process capability of the management review process? The results could be embarrassing!

### 5.2 Are the processes in the management system really needed?

One of my daughters is just completing her Master of Business Administration degree at a leading South African university. Although I have closely followed her progress through the various course curricula of the past two years, at no stage was there anything other than a single passing reference to the existence of ISO management system standards. From what I can gather informally, her experience is not unrepresentative.

The question that makes me pause and wonder sometimes is the following 'if the content of a standard like ISO 9001 is really so powerful, why is it that there are only 1,300,000 companies, worldwide, certified to this standard?' Why does it not receive prime time at the high profile business schools?

Perhaps, if we are honest with ourselves, the answer may not be hard to find – that we are not asking the right questions, or perhaps even more challenging – we are not focussing on the processes that really count in 'normal' or if we are honest – immature businesses. But more about that in a future article.

## 5.3 Wrap-up

The next article in this series will take a deeper look at some of the attributes of processes, namely, effectiveness, efficiency, process capability, and lastly - a topic that is outside of the scope of ISO TC 176, the concepts of organisational process maturity.

### Author Details



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# Abolishing the Standard-Based Mind-set with ISO 9001

By T D Nelson

## What is ISO 9001?

ISO 9001 is, and always has been, a standard against which a Quality Management System (QMS) can be assessed. It is not, and never has been, a roadmap for QMS design, a guide for QMS documentation development, or a substitute for real quality management. Quality management is management's job and ISO 9001 is simply a tool used to assess whether or not quality management meets a predetermined set of basic quality assurance principles.

However, shortly after ISO 9001 was first released in 1987, organizations were given the impression that the ISO 9001 requirements themselves were supposed to be implemented in organizations, to be followed like some kind of recipe for success. This resulted in a mind-set that is prevalent still today. This mind-set results in viewing a QMS as being developed in response to a standard's requirements, rather than being raised to view and manage processes affecting quality toward improvement leading to customer satisfaction.

## Standard-based mindset versus Process-based mindset

There is a difference between a standard-based mindset on the one hand and a process-based mindset on the other. While, unfortunately, certification can still be achieved using a standard-based mindset, quality is not properly managed and achieved until a process-based mindset is adopted. When defining a QMS, first think of Deming and the PDCA cycle, don't think of conformity to requirements. Worry about that later after the system has been defined.

The idea that ISO 9001 is supposed to be a management tool or QMS implementation guide is a myth. ISO 9001:2008, 0.1 states:

*"This International Standard can be used by internal and external parties, including certification bodies, to assess the organization's ability to meet customer, statutory and regulatory requirements applicable to the product, and the organization's own requirements."*

By the above, the standard is saying that ISO 9001 can be used for assessing organizations' ability to meet certain requirements. It can be used by a variety of interested parties to assess any given organization's ability to meet those requirements. Nowhere does the standard state that it can be used as a management tool or a QMS documentation guide. The standard is articulate enough to say so, but it doesn't.

ISO 9001 has been properly implemented ("put into effect") when auditors apply it as audit criteria. When ISO 9001 requirements have been implemented in organizations and used to define their QMS, it is has been misapplied and improperly implemented. In fact, the standard actually

admonishes against using the standard as a basis for QMS structure or documentation when it says, again in 0.1:

*"It is not the intent of this International Standard to imply uniformity in the structure of quality management systems or uniformity of documentation."*

Every organization that documented its QMS in response to a standard intended to assess QMSs has applied a standard-based approach, thus failing to apply a process approach demanded by the 2000 revision.

This simple misunderstanding has caused plenty of pain for many organizations. No wonder ISO 9001 certification numbers are dropping in many parts of the world. Plenty of organizations are still under the impression that ISO 9001 actually requires senseless painful concepts and documents to be implemented in the name of certification.

## Background to the standard

In the 90s, it was very common for a consultant to arrive at a client with twenty canned procedures responding to the twenty elements of the standard. The consultant was viewed as being the process "expert". The objective was to spread the twenty cans out on the conference room table and proceed to cram the organization into these twenty ill-conceived cans that will never suit any organization. In contrast, the consultant should have been asking to speak to the organization's resident process experts in order to develop the organization's procedures around their core processes. The procedures were probably already in place, it would have been a matter of documenting them sensibly. This is a far cry from writing an armful of procedures to address requirements, then trying to bolt the resulting documents onto real processes. Again, the idea was to document real processes so conformity with requirements could be seen, rather than just reproduce the stated requirements. The former results in documentation intended to help management manage, while the latter results in documentation intended to help auditors audit.

By the end of the 90s, it was clear to ISO TC 176 (authors of the standard) that ISO 9001 was being widely misapplied. Consultants were urging organizations to treat it as some kind of recipe for quality success that was to be implemented within organizations as a management tool. They gave the impression that ISO 9001 described or prescribed the processes needed to assure quality, and if followed, this recipe would magically assure management of properly managed quality.

## Procedure based approach

It was never the intention of ISO 9001 for organizations to adopt procedures based upon the various elements, clauses,

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or sub-clauses of the standard. Unfortunately this was not made clear until 2000, when the standard itself admonished against uniform QMS structure and documentation (e.g., QMSs that were structured and documented according to the published requirements of the standard).

While the 1987/1994 versions of ISO 9001 required documented procedures addressing the twenty requirements, it never specifically required twenty separate procedures to address the twenty stated requirements. Though the difference may appear to be subtle, the result is not. Those organizations raising twenty procedures in response to the twenty elements of the standard basically missed the point of the standard. Worse, they unwittingly cheated the intent of the standard, and finished up hurting themselves as a result.

Then when the 2000 revision came out with only six clauses explicitly requiring documented procedures, the standard-based mind-set overlooked the new standard's explicit endorsement of, and requirements to use, a process approach. So a standard-based approach went from requiring twenty procedures to only six.

Of course, using a process approach, organizational processes are determined by the organization, not by the standard, so the number of processes depends more upon organizational structure than the structure and requirements of the standard. The number of processes and procedures needed by an organization did not depend upon ISO 9001 but rather on the magnitude and complexity of the organization wishing to satisfy customer requirements.

### So what really is ISO 9001?

Look at it this way: ISO 9001 certification is a test. The ISO 9001 auditors proctor the test. The criteria of the exam are widely published, so the test is no secret, it is open book.

The authors of the test never intended for those taking the test to pander to the criteria of the exam in order to pass the test. The idea was not to pass the test by adopting documentation responding to the exam criteria, copying it from others who achieved certification (looking at previous test papers). Neither should organizations be buying the previously written QMS documentation from those guaranteeing certification, despite the fact they had never so much as heard of your company or had any idea what your company does or how your company does it. In any field that would be viewed as cheating.

So what would be the objective of cheating? It seems, it would be to avoid expending effort or resources required of not cheating. But here those who have adopted a standard-based approach (often unaware of the process approach alternative) have actually caused themselves much more trouble by simply not doing it properly in the first place. They are bending over backwards, actually going out of their way to cheat even if they don't know it. The organizational concept of systemic quality management is also damaged.

Instead, the idea should have been to demonstrably apply sensible quality management principles to existing operations. Successful organizations were already doing this anyway, but many of them were told to adopt a smattering of confusing procedures to define their QMSs in order to pass an ISO 9001 audit (exam).

### Consultants and auditors need to change

Consultants lamented in the 1987/1994 era that organizations

were reluctant to adopt these twenty confusing procedures. Consultants who were pushing these solutions commonly eschewed the phrase, "But we've been doing it this way a long time," as being indicative of an unwillingness to change. However, as it turned out, it was those very consultants who needed to change. Instead of cramming organizations into canned procedures, consultants should have been listening to their clients regarding how they actually operate and tailored the procedures accordingly. Now, decades after first applying a standard-based approach, it is consultants and auditors who are reluctant to change because they have met with great financial success, having "helped" hundreds of organizations over the years to acquire certification. Improvement is not just for organizations.

Auditors should never have accepted organizational QMS documentation based upon the standard, as opposed to being based upon organizational structure (i.e., using a process approach). QMSs defined by standard-based documentation should never have progressed to even stage two audits, let alone certification. Many auditors pushed standard-based solutions in their other lives as consultants, and many genuinely thought a standard-based approach was not only acceptable, but plenty appeared to be under the impression that a standard-based approach was actually required.

### Conclusion

Today, this same standard-based mindset pervades the ISO 9001 consulting, training and certification body community to the detriment of the real purpose of ISO 9001, quality management, and organizations' overall quality performance. It's no wonder the proposed 2015 version of ISO 9001 is again going to increase the emphasis upon the requirement to apply a process approach. It seems the authors of ISO 9001:2015 Committee Draft are trying to salvage the industry that has developed around ISO 9001 Standard by trying to ensure that the standard itself is properly understood and then applied effectively by industry professionals and organizations alike.

### About the Author



**T. D. ("Dan") Nelson has been involved with ISO 9000 for nearly 20 years. Holding an MA in Business Administration from the University of Iowa, he also has 12 years of experience as an IRCA-certified QMS Lead or Principal Auditor. Dan has conducted registration audits and surveillance audits, trained Lead Auditor candidates in accredited courses, and trained hundreds**

**of top-notch internal auditors. Using a process approach, Dan has taken scores of clients through registration to ISO 9001:1994/2000/2008 and related standards (e.g., QS 9000, AS9100, ISO 13485, and ISO 17025).**

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**Editor's note: SAQI thanks Dan for his contribution to "e-Q-Edge" that emanated from a number of discussions on Dan's "Linkedin" group "The process approach of ISO 9001".**

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## Creativity, Part 2 : Finding Creative Space

Think outside the square inside your personal space.



By: H. James Harrington



People often call on their creative powers only when they're faced with a problem. This is unfortunate because underutilizing this gift results in a reactive rather than a proactive approach to creativity. Individuals need to develop and use both their proactive and reactive creative powers to make maximum use of their creative potential.

Individuals or groups are motivated to become creative for different reasons. The most common are:

- A significant emotional or traumatic event (e.g., your car doesn't start in the morning, so you need to create a new way to get to work)
- Playfulness, brainstorming, or listing new ways to come up with something (e.g., a new way to serve a hot dog, such as on a stick)
- Systematic, purposeful creativity. The objective is to fill a void or come up with a better way to do something. It needn't be playful or problem-solving in nature.
- To satisfy a personal desire. Some individuals are driven to look at things in a different way, or they feel the need to be creative.

Creativity can occur at any time and any place. Sometimes we're very creative; at other times, it's just impossible to pluck out an original thought. We can do a lot to prepare ourselves to become more creative. Remember our discussion of the Oscar-vs.-Felix sides of the brain in last month's column? We can train the Oscar side of our brain to speak out more often and encourage the Felix side to listen more openly to Oscar's ideas. To do this, the following three conditions must be present:

- Time. Extra time is often required to develop and sell a creative solution that isn't in line with an individual's or organization's culture.

- Environment. It's difficult to be truly creative when you're continually interrupted by phone calls, questions, or children climbing onto your lap.
- Success. Nothing gets Felix's attention better than when we're recognized because we come up with creative new solutions.

Our emotions and actions are directed by our preconceived notions about the environment in which we find ourselves. We enter a library and begin to talk softly and move carefully. We go to a party and laugh and smile more. We go to work and become more conservative, reserved, and formal. This behavior is not only acceptable, it's expected. We've been trained to conform to the expectations related to a given environment or situation.

It's a good idea to set aside a specific location where you can exercise your creativity. It doesn't have to be a grand place: It could be a workbench in the garage or an old desk in the cellar behind the furnace. In my case, it's a desk in a small back bedroom. The important thing is that in your mind—as well as in your family's or business associates' minds—it's your space, and there are specific rules associated with it:

- Rule 1: No interruptions are tolerated unless it's an emergency.
- Rule 2: The clean-desk policy doesn't apply here. Don't take time to organize the work area, and make it clear that it's out of bounds to your spouse and or co-workers.
- Rule 3: Make your creative place visual. Use lots of Post-its to write down your good ideas, and stick them up around your area. Make sketches and flow diagrams and put them on the walls, too. Put up interesting pictures and change them often. Your creative place should stimulate ideas, not impress others.

- Rule 4: Create a relaxed atmosphere. Have a comfortable chair, one that you can lean back in while your mind goes blank and opens to creative thoughts. Have furniture that you can put your feet on. Choose a spot that's not too hot or cold.
- Rule 5: Have the right equipment. Be prepared to be flooded with new ideas. When they come, you need to be able to capture them rapidly. Things that can be useful are:
  - Good lighting
  - A computer
  - Lots of paper
  - Colored markers
  - A tape recorder
  - A CD or tape player
  - A filing system
  - A corkboard
  - A bookcase
- Rule 6: Have a focal point. This is something that relaxes you when you look at it. It could be a window that you look out of or a small aquarium. An ocean scene or an abstract painting works well.

Each person's creative place is unique because it must fit into his or her individual personality. Does this mean that it's the only place where you'll be creative? No. It's a lot like the treadmill you buy and put in your house to jog on. When you get on the treadmill, you don't start eating a sandwich; you start to jog. Just because you have a treadmill doesn't mean you can't jog around the block.

### About the Author

H. James Harrington is CEO of the Harrington Institute Inc. and chairman of the board of e-TQM College Advisory Board. Harrington is a past president of ASQ and IAQ. He has more than 55 years of experience as a quality professional and is the author of 28 books. Visit his Web site at [www.harrington-institute.com](http://www.harrington-institute.com).

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# Lean thinking in Health Care

By Jacques Snyders



I had a very interesting experience a couple of weeks ago, when I was invited as a guest speaker at a “Customer excellence in Health Care” conference, in the Johannesburg area. As a seasoned Lean Practitioner, and having worked with many service industries clients such as insurance, banks, and logistics companies over the last eight years, I should not have been nervous about presenting on the topic of “Lean in the Health Care”, but I must admit I was a bit uncomfortable. This probably stems from the fact that I have not personally, worked with a health care service provider or a hospital on a Lean improvement program before. Speaking with colleagues and other practitioners in the industry, I did know a great deal on the issues facing Health Care today, or of the various Lean improvement programs that had managed to yield results. I did know that Lean works in Health Care, and I did collect a lot of data and examples where it had worked, and which best practices of Lean helped to achieve the successes. Having gathered information within my network, I was much more comfortable about presenting at the conference.

So as I began working on my presentation for the conference, and reading more articles on the Lean interventions in Health Care, within the Lean community, I was pleasantly surprised on the focus of Lean in Health Care within the American Lean community. Quite a number of improvements were made in various areas within the Health Care industry. Some of these improvements include:

- Laboratories (Core lab, Blood banks etc.)
  - Reducing Turn Around times & Errors
- Operating Rooms
  - Reducing changeover times, increasing utilization
- Inpatient Care
  - More time for patient care, fewer falls & infections
- Outpatient Cancer Treatment
  - Reducing patient delays, increasing capacity
- Pharmacies
  - Reducing errors, improving response
- Emergency Departments
  - Reducing diversions, improving flow

On the morning of the conference, and armed with what I knew was a good presentation, I was eager to introduce the Lean concepts and philosophies to the Health Care audience. Admittedly, I did manage to convince the organisers, to give me the first slot of the morning session on day two of the conference. At least I then had the advantage of listening to the first day’s speakers, and the opportunity to make slight changes to my presentation. I could then place emphasis on the Lean concepts that

addressed some of the problems the previous days speakers had highlighted.



Half way through the first speaker’s presentation, who happened to be a retired senior nurse, I was as comfortable as Ryk Neethling in a swimming pool. Lean is a process improvement methodology, and health care is a process. Material is Patients, and operators are nurses & Physicians, and processes are processes. Whether it’s an assembly process or a transitional process or a medical procedure, all processes have inputs, and outputs. Things also go wrong in hospital procedures and customers are dissatisfied. Examples of all the 8 Lean waste types can be found in any process, even in health care processes. As the day progressed, more speakers were highlighting process issues and challenges, and I....., I just smiled, and categorised all their issues under the following waste categories:

## Transportation:

- Delivery of medication from central pharmacy
- Staff travel to a remote storage room to retrieve supplies
- Moving same patients, specimens or supplies around

## Inventory:

- Overstocked medication and other supplies
- Excessive supplies, linens etc on units and in warehouses
- Specimens waiting for analysis

## Motion:

- Transportation patients for tests & treatments

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- Searching for medicines or equipment
- Looking for materials, staff and patients

### Waiting:

- Waiting for other workers at meetings, surgeries, procedures, reports
- Patient waiting to be discharged or for test results
- Physicians waiting procedures or for test results

### Over-production:

- Duplicate charting
- Multiple forms with same information
- Excessive /redundant paperwork for patients & hospital staff

### Over-processing

- Retesting
- Duplicate or unnecessary procedures
- Extra lab samples than what is necessary

### Defects/ errors

- Medication errors Rework
- Variation in outcomes Incorrect charges/billing
- Surgical errors

### Skills

- Unclear MD orders
- Staff performing incorrect procedures
- Unskilled medical professionals



### Conclusion

The conclusion to this story was a pleasant one. The morning of day two, I introduced the audience to the basic concepts of Lean, and where Lean interventions did yield positive results in many Health Care facilities. It did not take long for the audience to start participating and highlighting more issues, once I introduced them to the 8 type of waste as defined in the Lean methodology. I didn't even need to convince them, as I continuously referred back to the previous day's speaker's presentations.

As we, practitioners, always say, "**Processes are processes, and all processes have waste**".....even Health care. !!

### About the Author



Jacques is Managing Partner and Operations Director of Business Improvement Practitioners in Pretoria. He holds various degrees in the operational fields of Project Management, Quality Assurance and Production Management, Certified Lean Master, Six Sigma Black Belt Trainer and Coach. He has 19 years' experience in Operations Management, 12 of those in the motor industry. He held management positions in Quality Engineering and Project Management.

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# Who is the customer of your document?

By Paul Naysmith

Looking back over my career, I have been fairly lucky in my view. I have not yet won the lottery, but that's ok, as I've always had a stimulating job, loving family and my good health. I have been fortunate and had generous amounts luck in my roles, as they have gifted me with tremendous number of friends with similar interests to me mainly around quality. I still keep in regular contact with my global network of quality professionals. Ironically, as a writer I don't often like to write to them; however prefer using social media or video calls. It was one recent video call with an old colleague from Europe, which helped me realize a question that few are conscious of: Who is the customer of your Quality document?

Oh boy did I have an interesting discussion recently about Quality systems. So the story goes, my good friend was developing and reinvigorating his employer's quality system, with someone who clearly didn't fully understand quality. I should really qualify that last statement. I am not trying to convey that it wasn't someone who doesn't work in our discipline, but rather a consultant employed with a global background in the implementation of quality systems. However throughout the discussions with my friend it started to dawn on us both; the consultant simply couldn't see what was important: the customer.

I'm five thousand miles from him, on a little pop-window in the corner of my iPad, attempting to help out my friend, who tells me that he is frustrated with a sharply dressed consultant, an apparent expert in quality. My friend's pixilated furrowed brow was caused by the explanation that the consultant was speaking at the front of a room of senior executives, letting his mouth dig a big hole for himself, and making a mockery of Quality Professionals around the world. "I wanted to help, I really did, but his mouth continued to run away from him." "It only got worse", he says, all this, for something as simple as defining the purpose of a QMS manual. I cannot escape the quirk of fate, that now I'm acting as a consultant to my friend via Skype, in an attempt to provide a listening ear and an understanding of how I can assist.

I have a very simplistic, well sometimes an overtly too simplistic view of business. Yes I know some companies are complex and have huge

interdependencies, however why do we have to make things more difficult than they need to be? In my experience, if something, like a documented procedure, is too challenging, it results in a very predictable and typical outcome: everyone ignores it and does their own thing. In business and in particularly for quality, in my view, achieving simplicity adds more value to an organization.

So here we have a QMS manual at a weighty one hundred pages in girth, apparently written in very difficult to interpret language, created by this Quality consultant. What a monster this document is. My friend, before attending this meeting with executives listening to an overpaid know-it-all, was asked to review it. He did, it took him two days to digest and he still didn't understand it. How could this be? My friend, a contemporary in Quality, someone so seasoned with practiced skills in reading Quality documents finds difficulty with it, how on this green earth would he expect anyone else in his business to understand, let alone accredit it?

After going into great detail on each chapter of the QMS manual, my friend asks for my opinion on this QMS manual. My only response produced a laugh across the other side of the world via a video chat, however, I had no intention of creating a joke of it; "If I fed this manual to a donkey, it would choke on it" I said. So I leaned back in my office chair, and if I had a long wizard's beard, I'm sure I would have been stroking it, looking wizened gathering my thoughts. So I asked the question, which I'm not sure that had been asked in his room of executives: "What's the problem that you are facing and what is the solution you would like to see?" Just as I asked this, I'm sure the screen froze. Had the internet gone down? It hadn't, however my friend couldn't give me a response and it was he who was frozen, frozen in thought. Sometimes a silent answer speaks louder than any wrong answer.

As with most vacuums in nature, this silence sucked a statement from nothing: "We're too bureaucratic and lack standardization across the business" he says. Alright, we've got to the bottom of our friend's problem and with this new QMS manual and unfortunately a new problem has also been created. A new problem

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of increased complexity has been introduced through his new manual. A new enemy to standardization across his business has been born into the world. The new QMS manual would probably make it difficult to understand for the users of it, and people being people, will find a way of doing their own thing to make life easier for themselves.

Now if you are reading this and thinking that your QMS manual is similar in page size or more, something must be wrong with it. Well I wouldn't or couldn't pass comment or even judgment on it, without knowing more about the business that it applies to, or how it was written. Why focus on the page count, rather than the content? And that got me thinking about who is the customer of this freshly produced output from a consultant? Who is the customer of a QMS manual? Who reads it, and why would they read it?

In the field of Quality, we may be asked to facilitate or even create documents. I like this task, I like writing evidently, but I don't like wordy procedures. I love simplicity. I prefer a picture book procedure, but I love a video procedure even more. Why give me pages of text, when a cartoon of what I need to do, which would describe it in a way that everyone can comprehend.

So I asked my friend this question of "who is the customer of this document?" and he couldn't come with an answer. To this question, in most circumstances when I am mentoring someone, I don't necessarily expect an answer immediately. I don't know the answer to this in his business, and he may not either; however it is a powerful question to be asked every time we create a new document in our daily work. We should challenge ourselves to ask why a document needs to be created, realize the significance of it and understand who is going to use it or read it, and consider its value to the business.

For my friend's predicament, the customer of the QMS manual could be the different departments that connect into or work from it, or it could be a certification body, or it could be all of those together. It is certainly not for me to define who his customer is or who to write it for, however, should we forget to consider the customer of this manual, we are going to fall short and have a dissatisfied customer to deal with.

So how can we avoid following in my friend's footsteps? Like any well managed project from my experience, being able to define at the very start what are the objectives and who are our key stakeholders is vital? This is echoed through time in Quality circles, in Juran's book "Juran on Quality by Design" (Juran, 1992), he goes into an interesting debate in chapter two, on which comes first: the goals or the needs? In his words a "chicken and egg" argument and there is

an "intimate relationship between the needs and the goals", and that the "customer's needs become suppliers' goals".

So my advice to my friend was to revisit who was his customer and what are their needs and that would define the goal of the QMS manual.

So as you too start to embark on either creating documents for your quality system or even revisit existing documents, please work on the same principle as you would do to ensure a quality service or product. Start with asking "who is the customer of this document?" and you, like my friend, will end up achieving a quality outcome.

### Works Cited

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### About the Author



Paul Naysmith as well as being a Quality Punk and Improvement Ninja, is the HSEQ region manager in the United States for a leading oil and gas well services company. He is a Chartered Quality Professional with the UK's Chartered Quality Institute (CQI) and an honorary member of the SAQI. Naysmith has a bachelor of science in paper science and management, has worked in industrial textiles, food manufacturing, and the aerospace industry. When not working, he enjoys photography, training to become a Cajun, and spending every precious moment with his family.

Paul is appointed as a regular contributor to the eQuality Edge. Reproduction of any of Paul's articles can only be authorised by contacting him directly at [naysmith@yahoo.com](mailto:naysmith@yahoo.com)



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# National Quality Week

11 - 15 November 2013

Theme

**"Building Quality into our Nation"** © SAQI 2013

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## Background

Our previous themes have moved from looking inward to our own organizations by "Placing Quality at the heart of our organisation" to expanding quality to our stakeholders by "Moving the Borders of Quality" to involving leadership for sustained quality by "Leading the Way to Sustained Quality" and last year we looked at everyone becoming part of the campaign by "Releasing your Quality Potential".

We are now looking at all individuals and organisations in all sectors to all join forces in a move to "Building Quality into our Nation" © SAQI 2013.

We hope to expand the support for Quality that has been growing over the past four campaigns to become a true national initiative involving all sectors of our South African economy.

For Tips and Guidelines on celebrating National Quality Week, and to Pledge your event or become a supporter of National Quality Week, visit [www.saqi.co.za](http://www.saqi.co.za)

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# Quality in Schools

a regular column by Dr Richard Hayward

As most of our readers are parents themselves, we have asked SAQI's education editor Richard Hayward ([rdphayward@yahoo.com](mailto:rdphayward@yahoo.com)), a retired headmaster and published author to give us some words of wisdom on how to get quality principles instilled in young people.

## Intelligence: it's about type and not how much

by Dr Richard Hayward

In my first year of teaching I taught a Standard Two (Grade Four) class. I remember a boy named Daniel who really 'battled' with school work. He could barely write a simple sentence without making many spelling mistakes. As for Maths ... well, that was a huge challenge too. There were teachers who dismissed him as intellectually weak and stated that Daniel would leave school and education forever on his 16th birthday. In those days that was when a person could legally leave school.

Yet there was a side to Daniel that I didn't understand. Yes, he found school work difficult but there was one area where he showed brilliance and was truly gifted. That was on the soccer field. Daniel was the most talented player in his age group. His pinpoint passing of the soccer ball to other players was incredible; his anticipatory movements on the field to be 'in the right place at the exact right time' for goal scoring, were legendary. On a soccer field, Daniel wasn't weak; he was spectacular!

As a young teacher, I grappled with the traditional understanding of what it meant for a child to be assessed as intelligent. A way of testing a person's intelligence was the IQ test which broadly measured verbal (language) and non-verbal (mathematical) skills. If a child scored high in those tests it was deemed capable of going on to tertiary education. If the IQ score was low, the child was thought as unsuitable for further education.

I happened to read a book written by Howard Gardner, a famous Harvard psychology professor. In his book, he didn't ask the typical question about intelligence. Instead of asking 'How smart are you?' his question was, 'How are you smart?' Gardner maintained that we are intelligent in different ways. Daniel, for example, would have been described by Gardner as having very high levels of **bodily-kinaesthetic intelligence**. That's the type of intelligence where one was able to 'control and coordinate complex physical movements.'

Gardner described seven types of intelligences that he believed that we all have to varying degrees. Besides Daniel's type which has been described in the preceding paragraph, the other six are:

**Linguistic intelligence:** The person who's strong in this area often learns new languages quickly and is usually very capable in the reading, speaking and writing of their mother tongue.

**Logical-mathematical intelligence:** Here the person is able to carry out mathematical tasks, analyse deductively and approach issues scientifically. Daniel, our young soccer player, also displayed this type of intelligence when he was using his physical skills to accurately angle the ball to pass it from him to other players.

**Musical intelligence:** The skills would include an ability to think in terms of sounds and rhythms. Often the person would display a high level of competency in playing one or more musical instruments.

**Visual-spatial intelligence:** Architects, engineers, graphic designers and painters are among those who fit into this category. They have, for example, an intuitive sense of where things should fit into spaces and also look aesthetically pleasing.

**Interpersonal intelligence:** Oprah Winfrey is a superb example of someone displaying this intelligence. The person is able to empathise and understand others. When it comes to motivating others, such a person does it well.

**Intrapersonal intelligence:** This person is able to go within themselves and understand who they really are. They display a heightened awareness of their personal feelings and emotions but also how to manage them effectively.

We all have a range of intelligences of different strengths. There is no need to feel inadequate in areas of less strength. The parent and the teacher can help a child grow in self-esteem and achievement by encouraging growth in all areas. When there are areas where the child shows blossoming talent, nurture that growth. Play to the intelligences of greatest strengths.

Every Usain Bolt, Albert Einstein, Leonardo da Vinci, Mahatma Gandhi, Miriam Makeba, Nelson Mandela, and William Shakespeare were once children who sat and learned at the feet of others. Insightful-of-the-child parenting and sound teaching led them to develop their specific intelligences. They were nurtured to become all that they could be.

Richard Hayward does programmes on behalf of SAQI. For more details of the Total Quality Education (TQE): the five pillars of Quality schools workshops, please contact Richard (011-888-3262; [rdphayward@yahoo.com](mailto:rdphayward@yahoo.com)). Poor schools are sponsored for hosting workshops.

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B14	Integrated Management Requirements	3	R4,650.00				
B16	Internal Quality Auditing	3	R4,800.00	4-6			9-11
B20	Organisational QMS Lead Auditor	5	R10,800.00			18-22	
B24	How to write procedures	2	R4,100.00	26-27			
B34	Statistical Process Control	5	R10,800.00		7-11		
B38	Development of QMS	5	R10,800.00			25-29	
B41	Introduction to Quality Control	1	R2,340.00	11			12
B48	ISO 9001 Requirements Workshop	3	R4,650.00				
B58	Customer Satisfaction and Excellence	2	R4,100.00				
B64	Introduction to Quality Techniques	3	R4,650.00	17-19			
B65	SAQI Certificate in Quality	10	R18,320.00			4-8	2-6
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