ISO 9000 is bad for business


Good afternoon

Just so that we're clear, my position is unequivocal. ISO 9000 has been bad for business, and is bad for business.

In 1979 Margaret Thatcher pushed the button on what was then BS 5750. She was persuaded that it had something to do with the Japanese 'miracle'. Of course nothing could have been further from the truth.

Despite many misgivings about how well 5750 was contributing to economic reform during the early 80s, by 1987 BSI had persuaded the international standards organisation to take this on as an international management standard. We have subjected the world to an economic disease, a disease that undermines economic performance. We should be ashamed.

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This is what I'm going to cover this afternoon: a bit of back ground about who I am and how I got into this, the research that I have conducted on ISO 9000, features of the ISO 9000 disease – what is actually wrong with the Standard. And finally the good news: we are now, I think, at the beginning of the end, this disease is going to die.

I'm an occupational psychologist. In the early 1980s I was trying to understand why people behaved as they did in organisations, you know you take honest God-fearing people off the street, put them in a building, call it an organisation and they behave like recalcitrant morons. I was starting to understand it's the system that governs behaviour. Many of our leading quality commentators have made the same observation.

In the mid 80s I was studying TQM programmes that failed: train everybody in tools, give them projects, they do 'quality projects' at four o'clock Tuesdays. What I learned was the theory implicit in the toolbox was diametrically opposed to the theory of the firm. What do you suppose is going to win?

It was Deming who first taught me that you must not understand and run your organisation as a functional hierarchy; you should understand it and manage it as a system. Deming taught me a lot about what is wrong with command and control management thinking but it was Taiichi Ohno who taught me much more about what to do instead. For those of you who don't know Taiichi Ohno built the Toyota Production System. The number of man-hours it takes to build a Lexus is less than the man-hours used in repairing a top-of-the-line German luxury car at the end of the line after they've made it. That's how good this is.

What Taiichi Ohno developed was an entirely different philosophy on how to design and manage work.

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This is the problem. Since Henry Ford's mass production system – an innovation, we think about organisations as top down functional hierarchies. We separate decision-making from work; we ask managers to make decisions on things like budget numbers, targets, standards, service levels, and so on and so forth. These are the means by which managers currently interfere with their businesses. We tell managers their job is to manage budgets and manage people. Now if we're going to tell managers there's something wrong with that, we have to explain distinctions in operational terms, hence the importance of this slide.

So instead of working on the organisation from the top down, you work outside in. Instead of designing in functional specialisms, you learn to design against demand that's what Taiichi Ohno taught the world. It is the key to Toyota's Production System.

You integrate decision-making with work because the people who do the work are much better able to control and improve the work, something that the ISO 9000 fraternity still struggles with. And finally you use different measures in a different way to achieve these ends.

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Taiichi Ohno achieved remarkable results in manufacturing. My work has been translating his ideas into service organisations. Service is quite different because the customer is involved in production; there is, inherently, much more variety in demand. However the good news is: if you're a service organisation change doesn't take long, because you don't make anything. It has taken the Toyota system fifty years to get to where it is. In service organisations change can sometimes be achieved in fifty days and certainly in fifty weeks. The only trouble is: you have to be prepared to change the way you think.

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The story of our service organisations right now is that they deliver poor service and carry high costs. I'm going to explain why that is and what the systems solution looks like and then I'm going to ask whether standards have made any contributions at all to these problems or their solutions.

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This is a basic archetype of a call centre or a front office service centre design. Managers are preoccupied with the numbers of calls they've got coming in, the service levels they're achieving, they monitor peoples activity, they monitor their peoples' adherence to scripts and procedures and they perform inspections to make sure people have 'done as they should'. Managers call these inspections 'quality monitoring' but as most people in this room ought to know inspection has got nothing to do with quality. Sometimes these organisations introduce a sort step. Those of you who know Taiichi Ohno's work would know that sorting adds no value at all to the work. Customers get through to what is called interactive voice response, press 1 for this and 2 for that, the customers sort their own work. Managers like this idea because

it's handing over some of the cost of production to the customer. As you will see it doesn't work very well.

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When you look at service centres as systems you find a number of major mistakes in their design and this is the first: treating all demand as units of production. To give you an example of this: I was working with a high street bank when call centres first came along. Call centres represented an opportunity to reduce costs; managers could get rid of people who 'did telephone work' in branches who were paid 14 thousand pounds a year and replace them with cheap labour in places like Swansea and Scunthorpe for 8 thousand pounds a year. It was to treat telephone work as a functional specialism, as something that was separate from other work. To plan their call centres managers sent out the O and M people to measure how many calls there were in the branches and how long they took. This sized the work. In this example managers planned three call centres with a thousand seats in each. After implementation they had an unanticipated rise in the level of demand so they opened a fourth, demand went up again so they opened a fifth, and it was about this time that I became involved.

The chief executive was very exercised about cost; it was after all a cost reduction strategy not a service strategy. Managers running the call centres said it was like the M25, they couldn't have anticipated how much their customers would enjoy and use the service. I spent a couple of days listening to calls and I learnt that in excess of 45% of the demand coming into the bank was what I call failure demand: demand caused by a failure to do something or do something right for the customer; and most of this was caused by treating telephone work as though it was functionally separate from other work. In other words they created the problems themselves. They did not talk to me for a year.

This is a vitally important issue in our public services right now. The government has told public service managers to e-enable their services, which includes putting up call centres. The truth of the matter is our public services don't work well so they have very high levels of failure demand. Do you suppose moving that work to another location and having the people who work in the call centre talk to the people who provide the services by electronic means is going to improving the service or lock in costs? I think you know the answer.

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This is the second big mistake – assuming the workers can be held accountable for the work they do. Some of you may be thinking he cannot be serious, because it's fundamental to the command and control thinker that workers should be held responsible for the work they do. Yet every quality theorist I know has shown that the greatest sources of variation in worker performance would be found in the system, the way the work works, not the workers. Let me illustrate this for call centres.

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Suppose I work for you and the work standard is 100 calls a day or 100 seconds average handling time. Yesterday I did a bit more, today I do a bit less, what happens to me? Well in the bad old days when managers were bullies you'd turn up and beat

the crap out of me. Now the HR department has told us the job of the manager is to coach, you turn up and give me therapy. My problem is that you turn up at all.

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If you take my performance over time and put it in a control chart (but I prefer to call these capability charts) you will find that John could do as few as 75 and as many as 125 calls in a day and that variation is in his system – the way the work works. Just consider for the moment the potential causes of variation in the workers performance in a call centre. Of course the complexity of the call, the nature of the customer, the appropriateness of procedures and scripts, whether the IT is working and so on and so forth. When you do this exercise for real in the call centres - and you have to, to help managers get off the idea it's the people the matter - you always learn that in excess of 95% of causes of variation are in the system: the way the work works.

In traditional call centre environments where the managers are focused on managing people, they are working on the remaining 5%. It's so incredibly dumb. Not only is it a waste of management resources, but what management is doing actually demoralises the workers. Let me ask you: who would you rather work for, someone who, whenever you happen to lose the lottery, brought you into a room to give you a one to one, or someone who worked with you on the causes of variation in the work, encouraged you to take responsibility for things under your control and took responsibility for the causes of variation beyond your control? It's self-evident isn't it? People like working in a system where everyone's contributing to its purpose. Managing people, doing one to ones and the like, serves no purpose.

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This is what you see when you study call centres as systems, high levels of failure demand, misroutes and drop outs (stupid customers not putting themselves in the right place!) You find that people aren't trained against demand, managers know nothing about the nature of demand from the customers' point of view, they train people in products and procedures; that's not the same as training against demand. But then the most astonishing thing is that the major causes of variation are actually in what managers are doing and the standards industry has had a big hand in creating these problems.

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And it's the same as when we look at the back office. This is the basic design for a lot of back office services. We get in the mail, we sort it, we allocate it to a worker, we do the work, we monitor the activities, the procedures, the managers measure the volume in their back logs, how much work people do, how much work goes out in two days, three days, five days etc.

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When you learn to see what was previously invisible, when you understand this work as a system you find errors introduced at the sort step, rework going on all the way through the work flow. Every time you look at a piece of work you're starting the work again. Because managers have broken the design into functional specialism you get fragmentation of the value work, you lose time, you duplicate effort. All these things create failure demand back on the front of the system and you find alarming end-to-end times (the real time it takes from the customers' point of view). Managers

might tell you they're achieving 80% of turn around within 3 days but often the true end to end time for customers can be as much as 30 or 40 days and even worse.

This is always a great lesson in why you should never measure activity but when you do your measures should always be end to end.

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The essential design requirement for a service organisation is to design to absorb variety so you train people against demand, you minimise or have no sort of the work you work the work to close, or you input clean to the flow, these are the kinds of measures that you need, what I call leading measures. If you improve on these measures you will improve on your budget, you reduce your costs, you improve your service, you improve your revenue. The paradox is if you manage with budgetary measures you sub optimise the system – ALWAYS.

I also make a distinction between permanent and temporary measures. Permanent measures are the ones that you use all the time to understand the system. Temporary measures you use when you think you have a problem. You take a measure, you redesign, you make a change, you check again with that measure. You should see the impact of the change within that measure on your permanent measures and then you turn the temporary measures off.

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These are typical results of using this methodology. Taking Taiichi Ohno's ideas out of manufacturing and translating them into service, typically you achieve as much as a 40% improvement in capacity. You improve revenue, service, efficiency and morale in one go. The question then becomes what role did standards have in all of that? I have to tell you the answer is they only hindered.

The Call Centres Association has published a best practice standard for service centres, it ought to be called a worst practice standard that represents all of the command and control diseases that I've just described. Of course the Call Centre Association represents a lot of outsource providers. They thought it would be a good idea to have a badge inspected by the BSI so they could say to the market we're good, give your work to us. Do you suppose it's smart for the markets to transfer lots of their failure demand to outsource service providers and pay them per transaction for the work? It is economic madness.

The other role that standards have played in call centres design is the creation of a national vocational qualification on how to do inspection of call centre work. It is barmy! And again it is part of the command and control disease.

So that's told you a bit about where I come from, what I'm doing, now lets move on to why we're here today.

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I had been working with early forms of these ideas in a computer services organisation during the early eighties and with considerable success. Having improved the performance of a one thousand-person-strong engineering workforce by some incredible numbers I was asked by the quality department what do we do about

5750. I asked: "What is 5750?"  They gave me a document, I went home, read it, didn't understand it and did what all people would do if they'd read something they didn't understand, I put it in a drawer.  I thought these people must know something I don't, it didn't connect for me.  Over the next couple of years people said to me what do you think of 5750, and I had to be honest and say well I don't understand it.  One day somebody said to me take it out and read it again and imagine that you're a bomb manufacturer in the Second World War; it will make perfect sense to you.

I did and it did! This was a way of working that was introduced to solve the problems of bombs going off in factories, and apparently it did solve that problem.  But what happened when we dropped the bombs over Europe? Many of them didn't go off.  I remember talking about this with audiences from the IQA and one day a man in the audience put his hand up and said 'I worked in one of those factories'; he told me they weren't controlling chemicals and people were still dying from exposure to chemicals.  It reinforced for me a great lesson in life; when you put in controls, people only pay attention to that which you chose to control.

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Concerned about everybody's disquiet with BS5750, I decided to look for research.  Apart from a telephone survey by Pera – and they were being paid to do 5750 – there was none. So I conducted the largest ever opinion survey on peoples' perceptions of 5750 (which then became ISO 9000).  And there were lots of problems: value for money, too bureaucratic, problems with assessors, lousy inspection experiences and whether this had any relevance to their business at all.  Why were they doing it?  Because it had been decided that it was a requirement for doing business.  Market place coercion has driven the up-take of ISO 9000, not underlying demand.

By the mid-80s ministers knew this was a problem.  Michael Heseltine was in charge at the time, so what did he do?  He said, well let's try to do one thing better, and he chose software.

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The Ticket Scheme.
The ticket scheme had more training for assessors and assessors had to be software engineers.  It was no more than an attempt to do the wrong thing righter. Has software improved since the ticket scheme was introduced? I don't think so. I took the results of my research to Ram Mylvaganam at the British Standards Institute; he told me I didn't know how to do research.  That was probably his biggest mistake! I went straight to the press and it started what for me was to become a campaign against ISO9000.  Opinion research was helpful in telling us there were lots of issues, but we didn't really know enough about what was going on when people implemented ISO9000 so I turned to doing case studies.

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I wrote about these case studies in my second book, The Case Against ISO9000.  Essentially I developed two propositions, I could go into any company registered to ISO9000 and show them that it made them do things that made them worse and it stopped them doing things they ought to be doing if they wanted to be better.  This was an economic nightmare!

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And here are some basic features of the ISO9000 disease.

The philosophy on error cause removal: ISO9000 tells you if something goes wrong you need to find out what the cause was and remove it and of course they like to see documented bureaucracy for all of that. Failure to make a distinction between special cause and common cause is a fundamental error. If you treat one-off special causes as though they're predictable common causes, you create unnecessary complexity in your system. ISO 9000 has done this in spades.

Standardisation: well of course Toyota believes in standardisation but from the point of view of the worker understanding the method and having meaning and measures associated with that, not standardisation by procedures and inspection they way we treat it. And standardisation in service organisations is the death of them; it drives up costs because of the inherent variety in the nature of customer demands. There is a major philosophical problem with the separation of design from process, something that ISO9000 still maintains to this day. In world class systems, design is integral to process management. That's how you learn. In so many organisations I go into the design of work is kept separate from, and a long way from where the work is done and any changes to the way work is done has to be referred to these central groups. It is madness; it is a way of keeping knowledge out of operations. ISO9000 has been built on a philosophy of inspection and yet we all know from quality theory that you can't inspect quality in. ISO9000 teaches you nothing about prevention.

Locus of control: suppose we could write the perfect standard that deals with a lot of these problems, and there are many others that I haven't talked about today. Suppose we could write the perfect standard. If we want managers to change and we surely do – there was a report only last week, yet another report to add to the many we've had over the last 30 years telling us that UK productivity lags behind. We do need managers to change. But if we want managers to change would we put the specification for what they are going to do in to the hands of a specifications body and then ask a third party to go and have a look to see if they do it? Of course you wouldn't, the best you're going to get is compliance, you won't get learning. If you want learning the locus of control should be with the manager.

I published all of these arguments material in my book and then to my surprise I received a letter from Japan.

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The writer was a world-class industrial consultant working in Japan and he told me that when ISO9000 came the same thing happened as happened in the UK: loads of redundant government people became assessors and consultants. All people who are not familiar with world-class thinking. But it's worse than that.

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This is the key sentence in his letter: "generally Japanese organisations are losing their world class systems by introducing the ISO9000 management system". Well I suppose you could say then, it's doing some good, it's nobbling the opposition. Takaji Nishizawa was doing his best to help the Japanese avoid all the perils of

ISO9000 so he asked if he could come to the UK to study some manufacturing companies.

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I don't work in manufacturing but through some contacts we secured him introductions to half a dozen SMEs all of which were registered to ISO9000, three of which were rated to be very good companies and three others.

These are the observations Takaji Nishizawa made following the visit. Although it's very interesting; during the visits to the companies he was very polite, never raised his eyebrows and my consultant who was working with him (who had manufacturing experience) was astonished to see how poorly run many of these factories were.

Takaji Nishizawa kept his own counsel but it all came out in the car journeys between the visits. Many of these organisations have massive bureaucracies associated with ISO9000. Takaji Nishizawa favoured simplicity focusing on the information, methods and tools that the workers needed to do the work. And he saw failures to do these simple things as a management responsibility. He was struck by how many of these companies were using quality methods for example, just in time, without first understanding the need to manage flow. There is no point in working with kanban systems (integrated just in time systems) until you've first learned to manage flow.

He made the same observations as I did about the separation of design from process and most interestingly in these visits we found that the forward-thinking leaders had big problems explaining what they were doing to very traditionally minded assessors. So in essence we learned the same things that we learnt form the case studies: the implementation of ISO9000 was sub-optimising business, even in the businesses where they were doing very well and using very good quality principles, they had problems explaining all of this to their assessors.

Takaji Nishizawa translated my book into Japanese and I have to tell you it sells better in Japanese than it does in English; it's just a measure of how curious Japanese managers are and perhaps how uncurious British managers are.

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Then a second letter arrives from Japan. This man is translating my current book. When he first started reading the book, he said that he couldn't really connect with it, but then he says 'and now I've got the perspective of your book I find that most of these trees are rather familiar to me'. Well of course they are! I learned these ideas from Taiichi Ohno and simply translated them into service systems.

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And he said the same thing as Takaji Nishizawa: "I was rather antagonistic to your country simply because you initiated the global standard ISO9000; it's taking Japanese organisations backwards."

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And I think I understand what he means by the first sentence; the Japanese are losing world-class thinking. ISO9000 one, Japan nil.

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But here's the good news: ISO9000's in trouble. Oh, but no according to Alan Bryden… Current Secretary General of the ISO organisation. Just like any manager at the top of a command and control system he's seen data that makes him feel encouraged. "Another year of growth" he says.  But what do the numbers show?

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Well here's the truth, the rate of growth is slowing markedly.  In the mid 90s we saw growth in excess of 50 but in 2002 was only 10%. What's happening?

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Well this is what's happening in mature countries: it's dropping off.  It's also interesting to note that the massive rise in the UK ceased when the grants ceased, grants from the DTI to use Pera and organisations like them, to get registered to ISO9000. So that's what happening in mature countries, what's happening in newly adopting countries?  They are being coerced into adoption.

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In China for example and that line should be three times higher, we've just divided by three to put it on the same slide, but in China coming into the economic world, the ministers have been persuaded that ISO9000 is a necessary requirement for getting into business in the international community.  In Romania they are being told that this is a requirement for doing business in the European Union. And the same thing's happening in Japan, despite the fact that, and this is most interesting, in Japan Toyota tried ISO9000 in one of its factories, it was spectacularly unsuccessful so they stopped doing it.  But even though Toyota had announced it has no value, the Japanese market is growing through ISO9000 and once again it's simply because of coercion.  Here's some more correspondence from Japan:

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Takaji Nishizawa tells me all the growth is due to market place coercion, he talks about how the construction industry took off and how following the rush we have waste and bureaucratisation.  Then he says the bigger problem is that we now have a requirement to get all suppliers registered to ISO9000.

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This affects the car industry because many component suppliers  in Japan now supply worldwide and as he says here reported in the May/June issue of Management System, the ISO magazine, he says 8 out of 10 cars will be running on ISO9000 by 2006, is this good news?  Well let me tell you this: the other two cars are Japanese. I think you know which one I'd buy.

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The year 2000 revision of the standard required everybody to upgrade to what was believed to be a new and improved standard. That's an interesting idea isn't it, if that's an improvement then it's a recognition that it wasn't very good in the 94 review, let alone in the 87 review or in the original 1979 version. Some people say this is continuous improvement. I say this is an acceptance that we've done something wrong.  But nevertheless, look at the numbers, six thousand firms said they're not going to transition to ISO9000: 2000, of the remaining sixty one thousand few had

transitioned. It left fifty one thousand or more to transition by the end of 2003 or lose their certification.

BSI is now telling us we have a 95% conversion rate. But what issue does that raise? Well, we did 51250 firms in one calendar year, that's 200 every business day.  How could that have been done if it wasn't full of corruption? it is hardly credible.  This is something that ought to worry Lord Lindsay (chairman of the UK Accreditation Service).

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When he was Secretary General of ISO, Lawrence Eicher accepted that we have problems with our certification bodies. However, he thinks the answer is that we need to police ourselves better.  I think the answer is this is a system problem.  We have created a market for charlatans and parasites.

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When she was Chief Executive of UKAS, Linda Campbell was saying we have a problem. There's surely enough smoke there to suggest fire!  And she says that we hear allegations that certification bodies mix certification with the provision of consultancy. I know certification bodies that target their inspectors on selling value added services.  It ought to be a criminal offence.

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And even amongst the assessment community they are saying that everyone has made it too easy. You know they say that ISO9000 is quite hard to get, but even harder to lose.  Because, of course, these parasites make their revenue from registrations.

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But the good news is: I believe it's the beginning of the end.  I know many people in the Ministry of Defence who are less keen on coercing their suppliers to register to ISO9000. Wasn't it extraordinary this year that the BSI was telling the market place that the MOD requires all of their suppliers to upgrade to the new standard. That's BSI telling them, not the MOD telling them.  I think you know why.  I know many private sector organisations where the senior people in charge of quality are reviewing their policies on coercing suppliers to register to the standard.

The interesting thing is that everybody knows there are bad examples of ISO9000 implementation and I ask everybody who's in favour of the standard: how many bad ones should we need in order to say stop? Before you answer that question, think of what the Toyota answer would be…

Should we tolerate 5% of companies begin worse off, 20% of companies being worse off? I maintain 100% of companies are worse off, but if you take a view that's different to mine what would you tolerate as a level of sub-optimisation?  More and more people have been recognising what I've been saying all along, this is bad; this is no more than a bad theory for the control of output.  Peter Sholtes calls ISO 9000 quality for underachievers; I think he's being generous.  What we have to worry about now is what do we do, how do we get from here to where we need to be?

I think Lord Lindsay should implement an immediate review, a public enquiry to establish what's going on in the name of quality. If I had his job I would withdraw accreditation from all ISO9000 certification bodies, it is a madness to specify a management standard that's not based on knowledge. For that matter it's madness to specify any management standard at all.

We should warn all of the newly adopting countries that they've been duped; we should tell them that ISO9000 is in decline in countries where it is 'mature'. We may say we have matured but the truth is we've wised up! It doesn't work. In 'mature' countries it has not penetrated 1% of companies – and at this meagre level its up-take is slowing down.

And finally I turn to Frank Steer. What are you going to do Frank? You run an organisation that has been built on ISO9000, you inherited an army of redundant government inspectors during the early 1980s as a membership base, the average age of membership in the IQA is somewhere north of 50, we need to get managers excited about quality, should the IQA follow the fads? I don't think so.

I was shocked to see the last John Loxham memorial lecture feature a salesman talking about Six Sigma. Six Sigma has already been discredited by those who have knowledge of the problems in its statistics and the problems in its method of intervention. In short there is no requirement to change thinking in Six Sigma, there is no good quality management thinking in Six Sigma but of course it appeals to the command and control mindset.

 If the IQA follows the fads, it will be in trouble. The IQA needs to return to basics. Quality in my view is the most exciting subject on the management curriculum. We have to make it exciting again, we have to separate quality in the minds of managers from ISO9000, Excellence, Six Sigma, Charter Mark, and all the other junk we have been force-feeding them with for sometime. We need to get managers interested in whatever it was that was that this Japanese businessman did that resulted in a system whose market capitalisation is equivalent to the big three.

Taiichi Ohno taught the world some profound ideas, most of which are still completely unknown to the majority of managers. In my view the best way we can send a signal to all managers around the world is by telling them that ISO9000 is off!

It's off because it's bad for business, it's off because it represents no more than a bad method for the control of output, it's off because it won't take us in the direction of world class thinking.

And if we do that, we will at last provide a service to the management communities.

Thank you for your attention and good afternoon.