Six Sigma – starting
SIMPLY

General Electric is renowned for the success of its Six Sigma improvement programme which has contributed several billions of dollars to the company's bottom line as well as delivering improvements in customer satisfaction. GE was not the first to adopt Six Sigma – the approach originated at Motorola, but it was the first major corporation to also extensively deploy the approach in non manufacturing businesses, says Vince Grant of Catalyst Consulting.

Many other companies across manufacturing and service sectors have since adopted Six Sigma and achieved proportionately similar results.

There are many reasons for GE's Six Sigma success, though arguably the most significant contributing factor was the constancy of leadership during the reign of Jack Welch. Six Sigma was a consuming passion for him and all the business leaders working for him, and as a result the company made the necessary investment in training and releasing its people to undertake the process improvement and design projects that are characteristic of the Six Sigma approach. Because of sustained determination and persistence with the approach the investment has paid back many times over.

But not every company has a Jack Welch look-alike, and in today's tough business climate CEOs are increasingly focussed on short term results from a declining level of investment. Many are impatient and demand results in the current quarter when many Six Sigma projects typically take two quarters to complete. How can we persuade the CEO to invest in Six Sigma if this requires a substantial initial investment and a payback period of close to a year in its beginning phase – no matter how good the results of companies that have invested over years to achieve three fold paybacks in the later years?
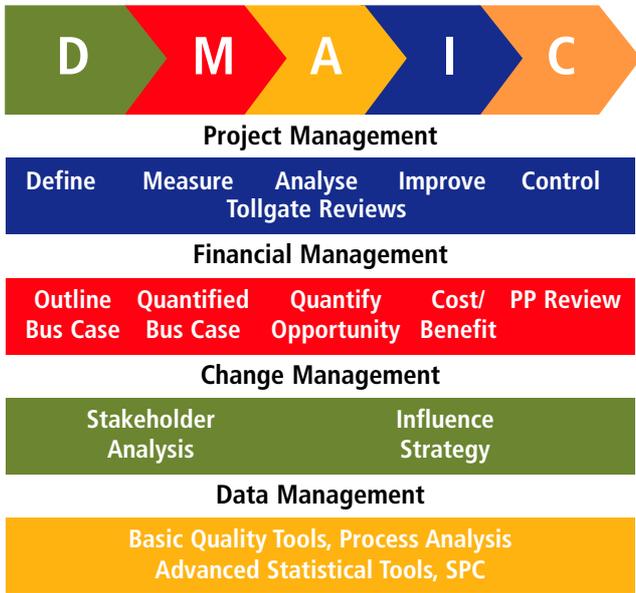
Results
Of course one answer is to find ways to lower the starting hurdle to get Six Sigma results. At Catalyst Consulting we are helping our clients to do just that in a number of interesting and different ways. We recognise that there is much 'ground fruit' and 'low hanging fruit' that can be picked relatively easily in many companies. Most companies have many processes with cost incurring steps that add no real value. Even manufacturing companies that have embraced Six Sigma have often not paid enough attention to their support service and transaction processes! Many initial Six Sigma projects do not require 'rocket science' techniques and complex statistical analysis – though that may well be useful later for more intractable problems once the more straightforward ones have been tackled. For every major problem that requires complex analysis there is likely to be at least one other that can be solved simply – provided we can assemble the facts and use fully the knowledge and experience of the people affected.

Select the right projects
So the first ingredient is to select the right initial projects – those problems significant and urgent to the business that

Go-4-It – Six Sigma Process Improvement

D	M	A	I	C

Project Management

Define	Measure	Analyse	Improve	Control
		Tollgate Reviews		

Financial Management

Outline Bus Case	Quantified Bus Case	Quantify Opportunity	Cost/ Benefit	PP Review

Change Management

Stakeholder Analysis	Influence Strategy

Data Management

Basic Quality Tools, Process Analysis
Advanced Statistical Tools, SPC

Go4It – Fast track Six Sigma Improvement

Three Key Phases

Go-4-It Planning

Go-4-It Meeting

Go-4-It Follow up

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have a high probability of being quickly and effectively addressed with a minimum of complex analysis.

The second ingredient is to simplify and shorten the training cycle to get people proficient in those limited number of simpler tools and techniques truly essential to completing these initial projects expeditiously. Whilst the traditional Six Sigma Black Belt (project leader) training has taken four weeks or more and Green Belt (project team members or leaders of more localised projects) two weeks, the fast track training for initial projects for both team leaders and members can be reduced to a week or less with considerable financial and time savings.

The third ingredient is the Six Sigma project methodology. More complex projects of course require the full traditional DMAIC (define, measure, analyse, improve, control) approach and toolset, but what if we could call timeout on these steps? We can, provided that the solution is within the knowledge and experience of the people affected by the problem, and provided that simple facts and data are available and sufficient to identify the root causes and develop an appropriate solution. This may well be the case for the correctly selected initial projects we referred to above. Getting the decision makers directly involved with the project team is also important enabling the business to cut through and implement improvements in an accelerated timescale.

Timeline
We have called the fast track approach 'Go-4-It'. These projects have typically three phases: preparation, meeting, and follow up or implementation. All are rigorously time managed to ensure improvements are delivered in just a few weeks.

In the preparation phase a project leader (or Black Belt) will agree the subject, scope and organisation for a project with the business leaders (represented by a champion). He or she will then assemble a small team to obtain the relevant data and facts and prepare for the meeting phase. In many ways the approach is similar to the DMA steps of a DMAIC project, but the emphasis

is on keeping it simple and imposing tight deadlines on assembling and analysing the facts and data, and probably focusing more on process mapping and analysis tools (including cycle time and value added step analysis) more usually seen in 'lean manufacturing' or 'lean office' rather than on statistical process control data unless that is readily available.

The meeting phase involves the project team members – augmented by other people with experience of operating the relevant processes, together with the champion and other 'stakeholders' in the problem. The Black Belt and the augmented project team review the data and analysis, develop and recommend solutions that are then presented to the champion and stakeholders for an immediate timely decision. These decision makers are expected to say 'yes' unless they have very good reasons to do otherwise – and in such cases they have to disclose these to the team. This phase is broadly equivalent to the AI (analyse and improve) steps in DMAIC, but again is time bounded by the scheduling of the meeting. The accepted recommendations are then passed back to the team for timely implementation. (The recommendations have of course included a draft implementation plan developed by the team;
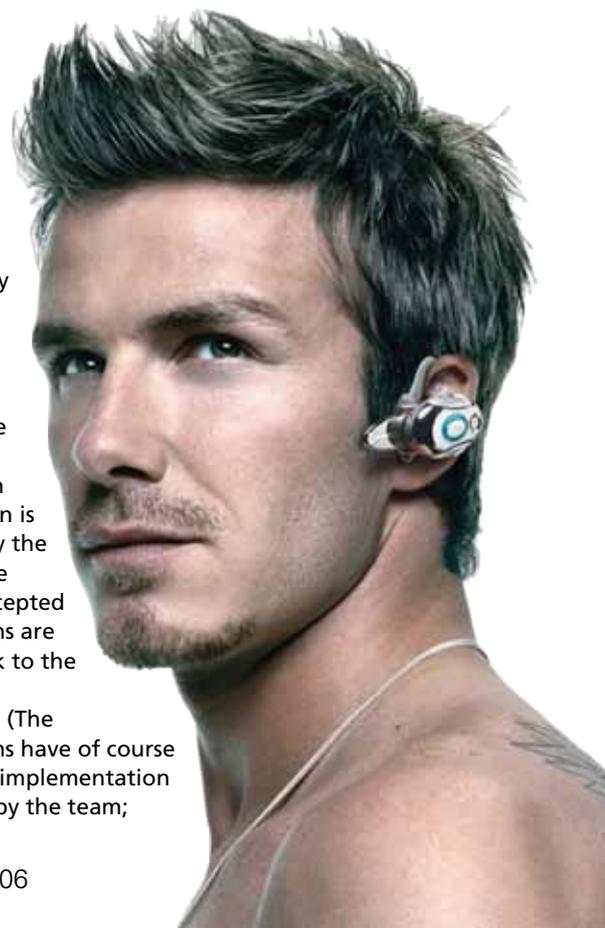
furthermore the team had been instructed to come up with recommendations capable of being implemented within no more than 8 – 10 weeks).

The follow up or implementation phase is led by the Black Belt with the support of many of the project team members and reviewed with the champion on at least a weekly basis. Again this equates to the C (control) step of DMAIC and requires a professional handover to the process owners in the business.

Training
We mentioned earlier that we have found that it is usually possible to train team leaders in less than five days. Also team members in about three days, and champions in a morning or afternoon. Running the training as a project simulation based around a real company issue gets real participation and involvement – and often some of the 'solutions' developed during the training are actually implemented afterwards. Later a further two weeks of statistical tools training is often sufficient to then upgrade the skills of some of the team leaders and members to enable them to lead traditional DMAIC projects subsequently.

Again we noted that choosing the best initial project is key to success. By including this as part of the training, and then reviewing the list with the group of champions ensures that there is real buy in, and business meaningful projects that are actually 'doable' within a tight timeframe. And since success breeds success – the success of the initial projects then provides fuel to ensure investment in the downstream Six Sigma programme.

After such initial projects have been fast-tracked in this way there will still be many other problems (the 'mid-level' and 'tall' fruit) that really do require the full rigorous DMAIC approach with carefully planned data collection and statistical analysis – and perhaps 'design of experiment' studies.

These projects will take four to six months to complete, and the Black and Green Belts will require further training to upgrade their skill-sets to undertake these projects. But by then the CEO and senior leaders will have recognised the value of the Six Sigma approach through the early successes of the initial projects and have developed something of Jack Welch's passion for and persistence with Six Sigma.

Nothing of course is risk-free. The initial project selection is critical because the fast-track approach is not appropriate to more complex problems – and leaders have the habit of encouraging 'scope-creep' and aspiring to tackle too complex problems too quickly. But it is appropriate to those problems where the solution is reasonably within the knowledge, minds and experience of those people working within the relevant processes – and with care meaningful problems of this type can be identified and prioritised.

To delay making improvements because more data and analysis is needed often involves more business risk than proceeding with improvements based on simple facts, analysis and relevant experience.
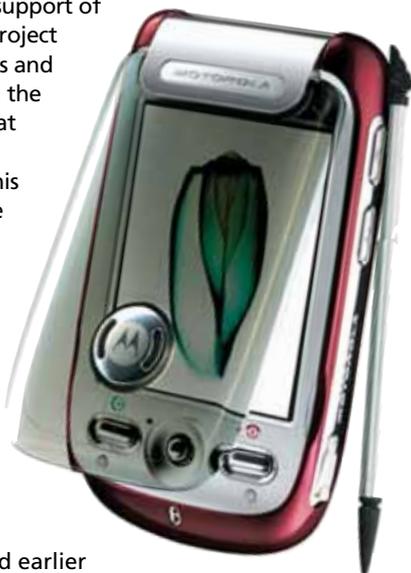
General Colin Powell's 40/70 rule is applicable here – if you have less than 40 per cent of the data you need don't make the call, but if you have more than 70 per cent then if you don't make the call now the enemy (your competitors) will steal a march on you.

Our experience tells us that more and more companies are seeking faster and lower cost of entry to Six Sigma – the approaches above provide one such route.