The Lean Six-Sigma Accelerated Improvement Method (A.I.M.)
The Lean Six-Sigma Accelerated Improvement Method A.I.M.

What is AIM?

AIM is an intensive performance improvement programme with two objectives:

- To achieve quantifiable organisational performance improvement within 8-12 weeks
- To develop organisational capability to deliver future AIM projects

AIM employs the principles of two proven improvement methodologies: Lean Thinking and Six-Sigma, both of which have been widely adopted in the private and public sectors. When implemented well they can deliver spectacular results.

Lean has evolved out of the Toyota Production System (TPS) and has moved from its manufacturing roots into service organisations and the public sector. It focuses on identifying customer value streams, “implementing flow” and “eliminating waste”.

Six-Sigma’s focus on reducing process variation is sometimes described as “TQM on steroids”, where there are three underpinning principles of:
- understanding and meeting agreed customer requirements
- identifying failures and eliminating them, to reduce costs
- involving staff, at all levels in continuous improvement

The reality is that you can have the best of both worlds. Both sets of tools can help you improve performance. We have deliberately used the word “tools” here. Neither approach will deliver sustainable improvement without the right leadership and facilitation support. Tools and methodologies on their own are inadequate.
AIM brings together the tools, the leadership, and the facilitation to deliver measurable results in a relatively short timescale.

**How does it work?**

AIM works in 7 stages:

1. Identification of a business-critical project (or projects) with clear targets, measures and management sponsorship

2. Selection of an appropriate team who will become certified AIM Practitioners

3. Pre-work by AIM Practitioners to prepare themselves for the initial AIM event (to begin to focus on relevant business priorities for improvement)

4. An initial workshop event which takes the team through the AIM process in outline, and devotes practice time to defining the project(s), applying appropriate performance improvement tools and developing a plan for implementation of improvements within 3 months

5. Support to the team in the form of checkpoint coaching sessions where actions are reviewed and additional AIM tools are introduced to help the team progress with their project(s). In this way, the team learns the end-to-end AIM process by working on their own live projects and delivering real business benefits

6. A presentation of the results achieved by the AIM Practitioners and staff from the business area that has implemented the solution and “sign-off” by the sponsoring manager to confirm delivery against targets

7. A final assessment of the AIM Practitioners to confirm their capability to support future AIM Projects

We provide 10-12 days of intensive coaching and facilitation support over the 8-12 weeks of each AIM Project.

**Selecting AIM Projects**

AIM Projects should be chosen by senior management to address current critical performance issues. One of the characteristics of suitable projects is that performance data are available that can be used to quantify improvements at the end of the project. We help with project selection and use criteria such as:
A senior manager is available and willing to act as sponsor
The issue to be addressed is key to the business and it needs to be improved in no more than 3-4 months
Data are available to quantify performance before and after the AIM project
Staff in the affected area can be freed up to work with the AIM Practitioners to diagnose the problem and develop viable solutions

Selecting AIM Practitioners

The Six-Sigma approach usually develops skills at several levels, known as “Belts” (as in judo). AIM follows a similar approach, but without the jargon labels. Our four levels are:

- **Coach**
  - Can coach others in the AIM approach and basic + advanced tools
  - Has used the tools in more than one project and delivered measurable benefits

- **Practitioner**
  - Can use the AIM approach and tools without support
  - Can help others to use the basic tools
  - Has used the tools in at least one project

- **User**
  - Able to use the AIM tools with guidance from a Practitioner or Coach
  - Has been helped to use the tools in a project

- **Aware**
  - Has been to presentations on the AIM approach and tools
  - Has not used the tools, or seen them used in a project

To build a sustainable capability to use AIM’s Lean Six-Sigma approach and tools most organisations will need to train approx. one AIM Practitioner per 70-100 staff. This is the skill level that our core AIM programme achieves. Further support is available to develop Practitioners into Coaches.

AIM Practitioners should be chosen from an organisation’s best people. They are likely to be the people you can least spare; those who have a track record of delivering change, or have personal development potential. They are unlikely to be people who just happen to be “available”.

© 2008 ISC Ltd.
They need to be made available for ten days of AIM development over approx. three months and be able to devote a similar number of days to working on their project. It’s a big commitment and that’s why the choice of project is so important – there must be a demonstrable return on investment for the organisation.

**Pre-work**

For each project there is a “Focus and Commitment” meeting with our Consultant, the Sponsor and the chosen AIM Practitioner(s). There is a briefing pack with pre-reading to ensure the meeting is focussed and productive. At the meeting, we agree the project definition and scope, quantify current performance, set targets and gain commitment to the programme timescales. Each AIM Practitioner will then also have to gather some background information ready for the initial event.

**Kick-off Workshop**

This 2-day event begins the AIM Practitioners’ skill development and the application of Lean Six-Sigma principles to their project(s). They will learn:

- The principles of Lean Thinking and Six-Sigma
- The 5 Stages of an AIM Lean Six-Sigma project (DMAIC – Define, Measure, Analyse, Improve, Control)
- Lean Six-Sigma tools for the Define Stage
  - SIPOC process definition
  - Voice of the Customer and CTQ – Critical To Quality requirements
  - Process and Value Stream Mapping

They will also develop specific plans for involving the right managers and staff in their project.

**Action and Experiential Learning**

Over the following weeks the Practitioners learn additional tools and techniques to apply on their project. These happen in a series of “checkpoint coaching sessions”, with the consultant working alongside the Practitioners to review progress, reinforce previous learning and introduce the next set of relevant AIM tools. Between sessions, the Practitioners work on their project with colleagues in the organisation. They not only analyse the current problem but develop and implement viable solutions.
While many Six-Sigma programmes “sheep dip” people in learning statistical techniques, AIM adopts a more pragmatic approach. Only practical data handling and statistical tools are taught. If it can’t be used on the current project(s), it isn’t included. Having said that, so many organisations are poor at understanding and applying statistical thinking, we do ensure AIM Practitioners are capable of using essential tools for “managing by facts”. Depending on the nature of their project(s) the AIM Practitioners can expect to cover many of the following tools and techniques:

<table>
<thead>
<tr>
<th>AIM Project Stage</th>
<th>Tools and Techniques</th>
</tr>
</thead>
</table>
| Define            | - Project Definition  
                   - Stakeholder Mapping, Analysis and Planning 
                   - Process Definition (SIPOC) 
                   - Voice of the Customer (VoC) 
                   - Critical to Quality (CTQ) - Customer Requirements Analysis 
                   - Process Mapping 
                   - Value Stream Mapping (Current State) 
                   - Brainstorming |
| Measure           | - Checksheets/Tallysheets 
                   - Concentration Diagrams 
                   - Traveller Time-logs 
                   - Customer Surveys & Focus Groups 
                   - Data Collection Interviews 
                   - Stratification 
                   - Activity Sampling 
                   - Activity/Unit Costing |
| Analyse           | - Pareto Analysis 
                   - Basic Data Handling (Mean, SD, Graphs & Charts) 
                   - Statistical Process Control Charts 
                   - Cause & Effect Analysis (Fishbone Diagrams) 
                   - Seven Wastes 
                   - Value-add Analysis (VA Ratio) 
                   - Process Walk-through |
| Improve           | - Process Design/Re-design (To Be Mapping) 
                   - Future State Mapping (including Flow/Pull) 
                   - Risk Analysis 
                   - Rating Sheets/Decision Matrix 
                   - Force Field Analysis 
                   - Change / Implementation Planning 
                   - Cost-Benefit Analysis 
                   - Mistake Proofing (Poka Yoke) |
| Control           | - Corrective Action Process 
                   - Statistical Process Control 
                   - Visual Management (Visual Office) |
Present Improvements

The AIM Practitioners and staff from the business area that has implemented the solution present their achievements and get them “signed-off” by the sponsoring manager to confirm delivery against targets. This is an opportunity to demonstrate what improvements have been made and to identify any issues that still need to be dealt with by “management”.

Practitioner Assessment

The final stage is an event where the AIM Practitioners are given an assessment of their knowledge of the Lean Six-Sigma tools and how to apply them. Those who can demonstrate they have reached the required standard receive a Certificate of Competence.

At this point it is expected that AIM Practitioners would be able to help select and manage future projects, although they may not yet be skilled enough to coach others to their level of competence. Attaining the level of “Coach” requires successful completion of at least one more project and development of appropriate facilitation and coaching skills.

The Benefits of applying AIM

AIM delivers two things:

- A group of Practitioners who can apply Lean Six-Sigma techniques in a structured, but pragmatic way to solve business performance problems
- Quantifiable performance improvements in a period of 8-12 weeks

Our consultants have worked with organisations to help them:

- Reduce process cycle times (e.g. 48 days to 10 days – Facilities Management)
- Reduce transaction processing errors (e.g. 70% reduction – Financial Services back office)
- Reduce failure costs (e.g. 95% reduction in customer credits – Manufacturing)
- Reduce delays (e.g. 50% reduction in late payment of invoices – Facilities Management)
Our track record

Our consultants have been helping organisations in the private and public sectors to manage and improve their processes for nearly two decades. We have supported European Quality Award winners in their approach to process management.

We are not wedded to a particular methodology. We help clients identify their improvement goals and then develop an approach to achieve these; invariably ensuring their people develop the skills to make further improvements themselves.

Please contact us for more information about how we can help you to improve your processes and performance using Lean Six-Sigma techniques and AIM.
SIMPLY, IMPROVEMENT...

The Lean Six-Sigma Accelerated Improvement Method (AIM)

© 2008 Improvement Skills Consulting Ltd.
204 Blind Lane, Flackwell Heath, High Wycombe HP10 9LE
Phone 07850 728506 • Fax 0871 221 5638
E info@improvement-skills.co.uk • W www.improvement-skills.co.uk