Advantages and Disadvantages of Various Lean Six Sigma Deployment Approaches

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Agenda

• What is Lean Six Sigma
• Top Down
• Bottom Up
• Lean Six Sigma Awareness and Training
• External Specialists
• Governance Structure
• Success criteria
What is Lean?

- Lean Manufacturing originated in the 1950’s (Toyota Production System)
- Lean was based on Henry Ford’s philosophy of low cost, fast lead time and high quality and Deming’s 14 Points of Total Quality Management (TQM)
- Lean was adopted widely by manufacturing companies in the 1990’s as a rapid problem solving approach
- Increasingly it is being used in financial services and transactional environments
- Focus on **Waste Elimination** to reduce **Time**
- Tools to identify and attack waste through simple techniques anyone can apply daily in a relentless pursuit of further improvement

“Anything that does not add value for the customer is waste”
What is Six Sigma?

"Anything that does not conform to customer requirements is a defect"

- Defect Elimination
- Less Variation

Six Sigma

- Made popular in 1986/7 by the Motorola Corporation based on old concepts
- Expanded to GE where it was adopted as a management philosophy in the 1990’s
- Recognized as a powerful approach to achieve business process improvements
- Recently being adopted by financial services and transactional environments
- Focus on Variation Reduction to improve Quality
- Results driven approach suitable for all kinds of processes
- Works for simple and complex problems
- Dramatically raises problem-solving capability (DMAIC) with a projectised approach
Lean Six Sigma Is The Integration of Two Powerful Business Improvement Approaches

“Anything that does not conform to customer requirements is a defect”

“ Anything that does not add value for the customer is waste”

• Defect Elimination

• Cycle Time Efficiency

• Lean Speed

• Waste Elimination

SIX SIGMA

LEAN

Six Sigma Quality

Enables Lean Speed

Lean Speed

Enables Six Sigma Quality

• Less Variation

• Waste Elimination

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Why Implement Lean Six Sigma?
Why implement Lean Six Sigma?

To achieve both Quality (Six Sigma) and Waste Reduction (Lean) benefits that result in:

- Shorter customer fulfilment lead times
- Improved quality
- Lower costs
- Improved capacity utilisation
- Maximise invested capital
- Customer loyalty and retention
Top Down
Top Down…

Characteristics:

• Company wide program/plan
• Executive Sponsorship
• High impact and focus
• Experienced coaches in early phases
• Multiple dedicated teams – Lead by Black Belts
• Black Belt experience remains a key to success
• Extract top performers and allocate 100% to project
• Large investment made in training and future career
• Greater chance of realised benefits
• Greater focus on use of LSS tools
• Higher impact & breadth of projects
• Greater empowerment of Black Belts
• Higher trained team structure
Top Down…

Advantages

- Aligned to Strategy
- Will have top support, driven by and accountable – Champion may even be executive level
- Relative high level of benefit achievable
- Longer term sustainability
- Ability to leverage black belts for training of green belts across greater organisation
- “Career path” – incentive to become BB
Disadvantages

- Need to lead by example
- High change management requirements
- Higher cost and dedication requirements
- Risk of early inexperience
- Scarcity of skills
Bottom Up
Bottom Up...

EXECUTIVE

MIDDLE MANAGEMENT

OPERATIONAL

Bottom Up (Yellow / Green Belt)
Bottom Up…

Characteristics:

• Projects are initiated and run within departments
• Shorter project times
• Lower impact projects
• Very hands on and operational approach
• Experienced coaches in early phases
• Dedicated/part time staff (perhaps at a lower level of staff), team members are yellow belts or SME’s
• Less of a view on LSS methods and tools
• Less training requirement (yellow belt, green belt)
Bottom Up…

Advantages

• “Easier” access to required staff
• More skills transfer takes place
• Moderate level of benefits achievable
• Organic Buy-In (may be more difficult to achieve?)
• Less costly, “easier” to implement
• Less demands on staff
Disadvantages

- No strong link to strategy
- KPI and rewards must be linked directly to LSS outputs to incentivise
- Sustainability is a risk
- Benefits tracking may not be an integral part of the deployment initially
- Lesser chance of realised benefits
Lean Six Sigma Awareness and Training
LSS Awareness and Training

Characteristics

- Has top level support
- Mass training of staff at Green and Yellow belt level
- Improvement projects are not run as a corporate wide program
- Initiatives are identified and managed at departmental level
- Empower people to do it themselves
- No centralised focused LSS roles
- Less governance
Advantages

• Build internal knowledge (doesn’t guarantee competence)
• Potential to become self sufficient
• Indoctrinate LSS from beginning
• Career development
LSS Awareness and Training...

Disadvantages

- Low level of improvement
- Knowledge ≠ Competence
- If personnel not reward or recognised they will leave – as they are in demand
- Training alone will not deliver results
- Tendency to focus on training and not implementation of benefits
- ROI not tracked
- No formal adoption or entrenchment of LSS

Frustration due to lack of top management support
External Specialists
External Specialists

Characteristics

- Project specific
- High impact
- High focus on benefit realisation
- Use of external LSS specialist
- Should include skills transfer
Advantages

- Speed and results
- Competence and experience
- Good method of knowledge and skills transfer
- Frees internal capacity (less dedicated resources required)
- Does not distract from business as usual
External Specialists...

Disadvantages

- Expensive – relative
- Client will be reliant on consultants to deliver LSS results
- No retention or development of internal knowledge or skills
Governance Structure
LSS Governance Structure

Typical Multi-Team Governance Structure

Executive Sponsor

LSS Governance team

Steering Committee

LSS Black Belt coach/es

Process Staff
(YELLOW/GREEN BELT)

Team 1
Team 2
Team 3
Team 4

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Success Criteria
Success Criteria

- Team members must sever from daily duties
  - Black Belts / team leaders HAVE to be dedicated
  - Team members less so, however less focus = less results
- Do not treat LSS as an academic exercise
- You must measure and communicate RESULTS
- You need to use the appropriate tool for the problem
- Do not underestimate the people component in implementing LSS, Change Management is key
- Team members have to get your hands dirty to achieve results
- You must have clear goals when deploying LSS (LSS is not a flavour of the month)
- Clear link to organisation strategy
So which LSS approach?
So which LSS approach?

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<th>Benefit</th>
<th>Process</th>
<th>Tools/Methods</th>
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<td>Process Optimisation</td>
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<tr>
<td>Moderate Benefit</td>
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<td>Low Benefit</td>
<td>Logic and simple improvements</td>
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Questions?

Thank You