Operations, Quality and Lean Six Sigma Solutions
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COMPANY OVERVIEW

Deisell Consultants, LLC (DMC) provides companies with the key to internally define, improve and deploy measurement driven business enhancement solutions. DMC’s philosophy is that sustainable competitive advantage is achieved by embedding company specific and quantifiable continuous improvement and innovation (CI^2) culture that effectively aligns high level business objectives with frontline deliverables and measure of success.

Our team of experts help organizations develop client (and culture) specific proprietary performance excellence solutions and tools that increase labor productivity, enhance customer satisfaction, streamline supply chain management, and improve overall profitability.

LEADERSHIP

Dr. Deisell Martinez is the managing member for Deisell Consultants, LLC and Deivin Consulting Group, as well as a Visiting Assistant Professor at Florida International University, Miami, Florida. Dr. Martinez received her Ph.D. in Industrial Engineering (2010), M.S. in Management Science/Statistics (2004), and B.S in Systems Analysis (2001) from the University of Miami.

Dr. Martinez is a Certified Lean Six Sigma Master Black Belt, an alumni of Sponsors for Educational Opportunity (SEO) in New York, New York, and has served on the board of South Florida Hospital and Healthcare Association. She began her career as a Structured Products Derivatives analyst for JPMorgan in New York, New York.

Dr. Martinez has authored three releases of the book title Simple Lean Six Sigma, and published a number of articles through her research in lean six sigma, quality, operations management, and cultural transformation with focus on staffing solutions. Her philosophy is that “one cannot excel without delineated and quantifiable measures of success.”

Published articles include:


OUR PHILOSOPHY

Operations management (in theory) is the act of managing processes in business, operations and compliance in order to deliver products and/or services – the management of interrelated processes. In practice, operations management involves the act of overseeing day to day activities in order to deliver products and/or services; from this view, activities are not interrelated in execution of a common goal. This is often aggravated by organizations’ functional segmentation, which require strategic alignment of goals and deliverables in order to effectively support and achieve common macro organizational goals. The discrepancy between operations management theory and common practice creates opportunity for performance deficiencies. Over 90% of failures in execution are a direct result of miscommunication. As such, effective performance management drives clarity throughout all levels (top management to frontline) of the organization and across the three core pillars (business, operations and compliance).

DMC uses Lean, Six Sigma and Simple PI tools and principles to align macro business objectives with micro frontline deliverables and execution. Our objective is to remove non-value-added activities and streamline process components in order to gain control over processes that lead to substantial efficiency improvement and lower operating costs.

Traditional performance improvement concentrates on training and educating top and middle management. This approach increases the education gap between management and frontline, which raises the potential for miscommunication.
DMC’s methodology is to educate all levels of the organization, with focus on the frontline. In due course of time, the education disparity between management and the frontline is lessened.
OUR APPROACH

DMC supports client quantifiable performance improvement with three interrelated services:

1) Management Dashboard and Reporting
2) Training and Certification
3) Black Belt Contracted Service

Management Dashboard

Management Dashboard (MD) is a central reporting and management tool that aligns macro business objectives with critical projects, and measures project performance on the basis of critical to quality target(s) and timeline. This enables leadership to prioritize internal resources and leadership support on a quantifiable basis. MD is broken into two key components: Business Objectives and Timeline. Business objectives are listed with project assignment, baseline, target and current state. For assigned projects, a Lean Six Sigma Define-Measure-Analyze-Improve-Control (DMAIC) gantt chart is mapped from the start to the estimated project end date. The specific tools/actions are sub-listed and mapped to the expected completion date. Project timeline expected performance is track against its actual and delays are monitored and made actionable.

This tool enables management to see and understand how the organization is performing on critical business objective at a snapshot in order to make effective decisions. The tool is made scalable to divisions/departments, as well as Lean Six Sigma initiative contract management.

MD is submitted and discussed on a bi-weekly basis with a specific review for improvement to enable success.
**High level Dashboard**

**Component 1: Business Objective and Finance**

<table>
<thead>
<tr>
<th>Project</th>
<th>Objective</th>
<th>Finance Area (TTD)</th>
<th>Baseline</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical Procedure Enhancement</td>
<td>Lean Six Sigma</td>
<td>Pre-Define</td>
<td>Lynda Duncan</td>
<td>Increase block utilization of OR</td>
</tr>
<tr>
<td>Pre-Admission Testing Procedures</td>
<td>Lean</td>
<td>Improve</td>
<td>Lynda Duncan</td>
<td>Streamline the pre-operative process to decrease the amount of time it takes to complete the pre-op process</td>
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</table>

Total:

<table>
<thead>
<tr>
<th>Project</th>
<th>Objective</th>
<th>Finance Area (TTD)</th>
<th>Baseline</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient Pharmacy Process Improvement</td>
<td>Six Sigma</td>
<td>Define</td>
<td>Ras Raner</td>
<td>Reduce avg. time to fill prescription</td>
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</tbody>
</table>

Total:

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<thead>
<tr>
<th>Project</th>
<th>Objective</th>
<th>Finance Area (TTD)</th>
<th>Baseline</th>
<th>Objective</th>
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</thead>
<tbody>
<tr>
<td>ED Process Improvement</td>
<td>Lean Six Sigma</td>
<td>Pre-Define</td>
<td>Tanze Boll</td>
<td>To be defined</td>
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</table>

Total:

**Component 2: Timeline**

<table>
<thead>
<tr>
<th>Bed Management</th>
<th>Phase</th>
<th>Objective</th>
<th>Pre-Planning Data: Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Week 9</th>
<th>Week 10</th>
<th>Week 11</th>
<th>Week 12</th>
<th>Week 13</th>
<th>Week 14</th>
<th>Week 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Planning</td>
<td>Introduction</td>
<td>Data Collection</td>
<td>Expected Date:</td>
<td>Actual Date:</td>
<td>Notes:</td>
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<tr>
<td>Define</td>
<td>Project Charter (Cost - Benefit Analysis)</td>
<td></td>
<td>Expected Date:</td>
<td>Actual Date:</td>
<td>Notes:</td>
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</tr>
<tr>
<td>Measure</td>
<td>Detailed Flow Chart</td>
<td>Identify Key Metrics &amp; Performance</td>
<td>Expected Date:</td>
<td>Actual Date:</td>
<td>Notes:</td>
<td></td>
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<tr>
<td>Analyze</td>
<td>Identify Root Causes of Issue</td>
<td>Statistically confirm relationship between causes &amp; outcomes</td>
<td>Expected Date:</td>
<td>Actual Date:</td>
<td>Notes:</td>
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<tr>
<td>Improve</td>
<td>Revised Detailed Process map</td>
<td>Pilot Study</td>
<td>Implementation (6i)</td>
<td>Expected Date:</td>
<td>Actual Date:</td>
<td>Notes:</td>
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<tr>
<td>Control</td>
<td>Develop a sustainability plan</td>
<td></td>
<td></td>
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<td>Actual Date:</td>
<td>Notes:</td>
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Training and Certification

DMC believes that effective training design, execution, mentoring tools and facilitation, optimize the probability for successful project completion and sustainability. Our training program educates and instills practice in qualitative leadership and critical thinking as well as rigorous data-driven analysis through a series of case studies, simulations and live facilitation.

Case Studies – DMC team members and leaders use case studies to enhance the training experience and optimize the take-away. Case Studies are used in class to illustrate the use of all training tools through live in-class facilitation of project mentoring and management. Trainees are placed into teams and assigned models, which they use within the context of the case sample provided to them in order to improve the originally stated process into the outlined improvements.

Simulation – Successful case studies are simulated using in class recommendations to visually show trainees the live impact of their recommendations. The use of simulation is encouraged for processes that are complex to pilot. Simulations are used to determine implementation outcomes and probability of success. Simulations are done via client specific simulations systems, or are developed by our staff using excel and visual basic.

Live Facilitation and Mentoring – Facilitation and mentoring methods vary upon the design on the class structure.

Parallel Class/Field – In parallel training, training sessions are segmented over a period of time. In this case, trainees attend training and conduct field projects in parallel. That is, they attend class for the respective segment and spend the next several weeks conducting the segment of their project that pertains to the class module (i.e. Define, Measure, Analyze, Improve, and Control). Under this structure, mentors schedule weekly progress reports and assist in the field as needed to complete the respective tools.

Online Training – One of the favorites for most of our customers. The trainings are hosted via a live online session and the trainee, irrespective of their location can log in and attend class. It has an edge over the regular online trainings as the element of a ‘Live Instructor’ is not missing.
## Training Specifications

<table>
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<tr>
<th>Program</th>
<th>Objective</th>
<th>Scope</th>
<th>Requirements</th>
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</table>
| Green Belt| Teach project leaders how to successfully use advanced project management skills and tools to improve/manage process outcomes by rigorously identifying and controlling leading indicators (outcome drivers) and balancing/managing lagging indicators (desired outcome)                                      | CPI Core 1, DMAIC, DFSS, and framework with light focus on advanced statistical and flow methods | 1) Complete 4 day training program  
2) Pass the Green Belt Exam  
3) Complete a Green Belt Project                                                                                                                     |
| Black Belt| Teach project leaders how to successfully use advanced project management skills and tools to improve/manage process outcomes by rigorously identifying and controlling leading indicators (outcome drivers) and balancing/managing lagging indicators (desired outcome).                                      | CPI Core, DMAIC methodology and framework with strong focus on advanced statistical and flow methods | 4) Green Belt Certified; or, equivalent pre-training  
5) Complete 7 business day training program  
6) Pass the Black Belt Exam  
7) Complete two Green Belt Project; or One Black Belt Project – a Black Belt project improves at least two outcomes                                                                                     |
| Kaizen    | Teach trainees how to use advanced project management skills and tools to drive immediate and sustainable change in process and financial outcomes by applying systematic project management techniques along with key advanced lean and six sigma tools. | CPI Core and Kaizen methodology                                                                                                                                                                                     | 8) 1 day training                                                                                                                                                                                              |
| Simple PI®| Teach trainees the basics of performance, project and process                                                                                                                                                                                                                                                                          | CPI Core and Simple PI®                                                                                                                                                                                         | 9) 1 day training                                                                                                                                                                                              |

1 CPI Core refers to basic business, leadership, problem solving and critical thinking standards and skills needed to successfully complete projects. Desired outcomes are referred to as lagging indicators. The objective of LSS is to identify the key drivers (leading indicators) that potentially impact the outcome (lagging indicator), in order to control the outcome of the leading such that it mitigates the outcome of the lagging indicator (desired outcome)
Black Belt Contracted Service

DMC is unique from traditional consulting firms in that we provide a support system to help clients develop a proprietary performance improvement model that fits client specific culture. We enable greater transparency of business operations and provide meaningful information and performance metrics by empowering our clients.

Achieving sustainable results is a critical outcome of organizational improvements. In order to accomplish this, organizations may choose to set one or multiple dedicated individuals as Black Belts in charge of continued improvements including maintaining existing results and finding new opportunities.

DMC partners with its clients in to provide and/or manage client Lean Six Sigma Black Belt(s) as a managed service to support the internal organizational development and sustainability of Lean and Six Sigma methodology and sound performance integration. The role includes, but is not limited to:

- Performance Assessment and Integration,
- Project Management with tracking tools to establish a project management infrastructure within the organization,
- Innovation infrastructure,
- Conduct workout sessions for continued improvement and basic Lean Six Sigma development throughout the organization,
- Data Statistical and Fundamental Analysis,
- Integration of existing data tools and analysis with Lean Six Sigma practice,
- Organizational support for sustainability with development of Lean Six Sigma Yellow, Green and Black Belts,
- Other assignments are determined by the client.

DMC’s Black Belt(s) are internal to the client, and can be on either DMC or client payroll, but are managed by DMC to receive continual cutting edge performance improvement intelligence and development for integration and roll-out throughout the client’s organization - including but not limited to Client Training material.

The role is supported by a statistician Master Black Belt with a PhD in Industrial Engineering who is actively engaged in the continues Lean Six Sigma Methodology enhancement through material development and implementation breakthrough for pivotal Lean and Six Sigma Fortune 500 organizations and educational organizations (Universities).
**TRACK RECORD**

DMC’s team has achieved 75%+ return on investment in over 250 performance and quality improvement projects for more than 25 Fortune 500 companies and governmental bodies. Projects were based on Lean Six Sigma method and/or tools. Some projects include:

**County of San Bernardino**
Averted 100+ lost jobs in small and mid-sized privately held companies within the county. Conducted a baseline business assessment in past financial, operational and compliance performance. Structured and designed/developed business models for business excellence in primary deficient area(s), developed implementation plan, and trained selected personnel for handoff and sustainability.

**Food Service World-Wide Conglomerate Corporate and Subsidiary Companies**
Achieved 100%+ return on investment in productive hour utilization and quality score improvements. Led the development and effective implementation of Lean Six Sigma Program. Trained and certified in excess of 30 selected personnel in Lean Six Sigma.

**Fortune 100 Medical Device and Pharmaceutical Corporate and Subsidiary Companies**
Achieved 500%+ return on investment in vendor non-compliance costs. Led the development of the training curriculum for use by top strategic suppliers as well as execution of significant improvement/cost-out projects in partnership with key suppliers. Developed scorecards and dashboards for monitoring and tracking results.

**Jackson Health System Restructure**
Yielded 60+ million in saving by working with senior management to re-design the organizational structure and embed data driven results (via a dashboard) with quantitative performance structure (with Lean Six Sigma) Trained over 200 employees, including VPs, directors and managers on Lean and Six Sigma methodology.

**University of Miami Business Services**
Improved employee efficiency by 50%. Analyzed existing division employee workflows to establish an employee efficiency baseline. Designed and assisted in the development of an automated proprietary workflow system that optimizes work performance. Developed a monitoring dashboard and trained all staff and management on Lean Six Sigma methodology for handoff and sustainability.
REFERENCES

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City of Coral Gables
Walter Foeman, Clerk
Phone: 305-460-5209
Lessons Learned & Case Study
COMMON ROADBLOCKS

Accountability
- Irregular project review
- Project enforcement missing
- No consequence for lack of progress
- Resistance to change
- Project lead not from same department
- No support from management
- No data available
- Communication Breakdown

Management
- Undefined mentor’s role
- Undefined project purpose
- Project not on top of priority list
- Time allocation to work on projects
- Lack of support from immediate supervisor
- Mainframe data is not reliable
- Operational data is hard to get
- Financial data is hard to get

Project Selection

Data
CASE STUDY: SIMPLE PI APPLICATION

Problem:
Provider’s inability to deliver service to customer within 5 min. from the time service is requested. The baseline for service deliverance was 12 minutes prior to this project.

Observations:
Not only was the provider unable to respond to customer’s request within the acceptable time (5 min.), but provider was also unable to respond consistently throughout the day.

Tools Used:
• VoC – Voice of the Customer
• Flow Charting
• Data Collection
• @RISK Simulation
• Pilot Implementation
• PDCA

Benefits:
• Changed the way daily operations ran.
• Increased communication among staff by using better technology.
• Set up guidelines and protocol for service delivery.

CASE STUDY: SIMPLE PI APPLICATION

Tools Used:
Voice of the Customer: Surveyed Customers.
Tools Used:

Data Collection: Obtain Quantifiable info from Process. Use @RISK Simulator: Understand where process is broken.

Pilot Implementation: Now that we understand what drives the problem, let’s fix it.

VoC

Implement Solution based on VoC, Flowchart and Simulator Output

Quick Solution

Before:
- Provider’s inability to response to customer’s request within 5 min.
- Inconsistency of service deliverance.
  - Provider performed very poorly in the early hours of the day, but did better in the afternoon hours.
- Revenue loss and overtime costs unpredictable.

After:
- Reduced the average response time from 12 min. to 5 min.
- Reduced variation throughout the day.
- Increased customer satisfaction due to effective response time.
- Increased gross revenue and impact to the bottom line.