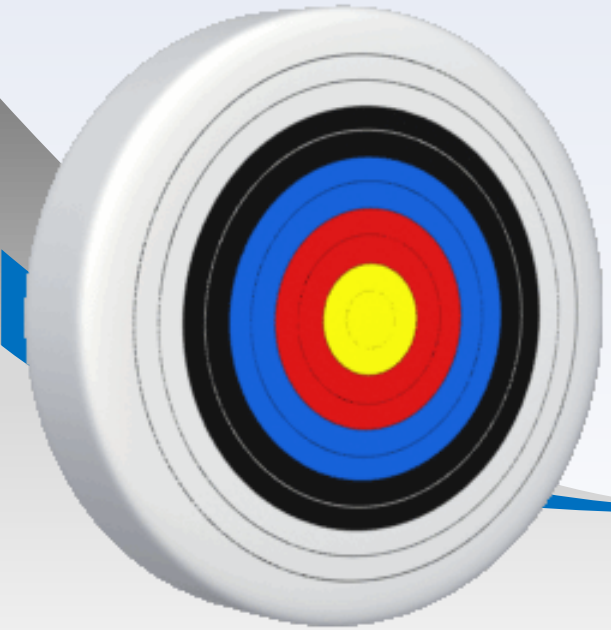
Lean Six Sigma Approach

Continuous Improvement At Its Best



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Lean Six Sigma Deployment Success

Success Factors:

- ✓ Based upon AIT Business Solutions experience
- ✓ Minimum factors to keep at the forefront of program planning and administration

Best Practices to Embrace

Common Pitfalls to Avoid

Failure Mode	Cause
No link between business objectives and project objectives	Lack of process and effort to formulate project definitions from business needs
Lack of clear and measurable project objectives	No emphasis on numeric measures of business performance indicators
Candidate does not spend 100% of time working project	Past job responsibilities are not diverted during training
Little financial or operational improvement as a result of training	Lack of practical application emphasis within training; over reliance on purely training material
Management does not support / enable changes proposed by projects	Lack of management ownership and participation in project work and project reviews; lack of periodic program assessment
Poor understanding of program purpose and objective by the work force	Poor formal communication plans exist; different levels of the organization communicated different expectations
Inability of the belt candidate to drive change	Poor assessment processes in place to select and match candidates to projects

Success Driven by Best Practices and Avoidance of Common Program Pitfalls

AIT Business Solutions

We Deliver Exceptional Training Worldwide

(Leadership, Champion, GB, BB, MBB, DFSS)

Full Program Management Support

- Parallel training of leadership, champions, Green Belts, Black Belts and Master Black Belts quickly builds a support infrastructure for fastest possible return on investment
- Leverages AIT experience in diverse environments – union, multi-facility, international, etc.
- Emphasis of team effectiveness helps to ensure effect melding of talents

Leadership and Champion Training

- Emphasizes desired Leadership behaviors to support Lean Six Sigma implementation
- Tailored level of knowledge transfer for leadership and champion roles
- Clarifies Lean Six Sigma expectations and deliverables for the Leadership team
- Defines selection processes for projects and candidates

Design for Six Sigma (DFSS) Training

- Focused on product and process designers
- Improves the quality of the function of the product or process
- Based on IDDOV methodology
- DFSS training is applied to actual live projects during training
- Courses are typically 3-4 weeks in duration

Master Black Belt Training

- Six one-week "boot camps" over a six month period
- "Train-the-trainer" as well as focused training in areas of specialization
- Includes customization of AIT Group training materials for client use
- Enables full transition of ownership to the client and development of internal program leaders
- Transformation into catalyst for change in the organization

Green Belt Training

- 5-10 days of training over three months (train-apply-review format)
- Bridges Lean Six Sigma culture to all company associates
- Source for Black Belt candidates
- Results oriented – structured to go after second tier opportunities
- Immediately engages the work force in the Lean Six Sigma program

Black Belt Training

- Five weeks of training over a four month period (train-apply-review format)
- Lean Six Sigma experts…backbone of program
- Utilizes AIT Master Black Belt instructors
- Built upon a tailored curriculum for each company
- Provides on-site project support between classes

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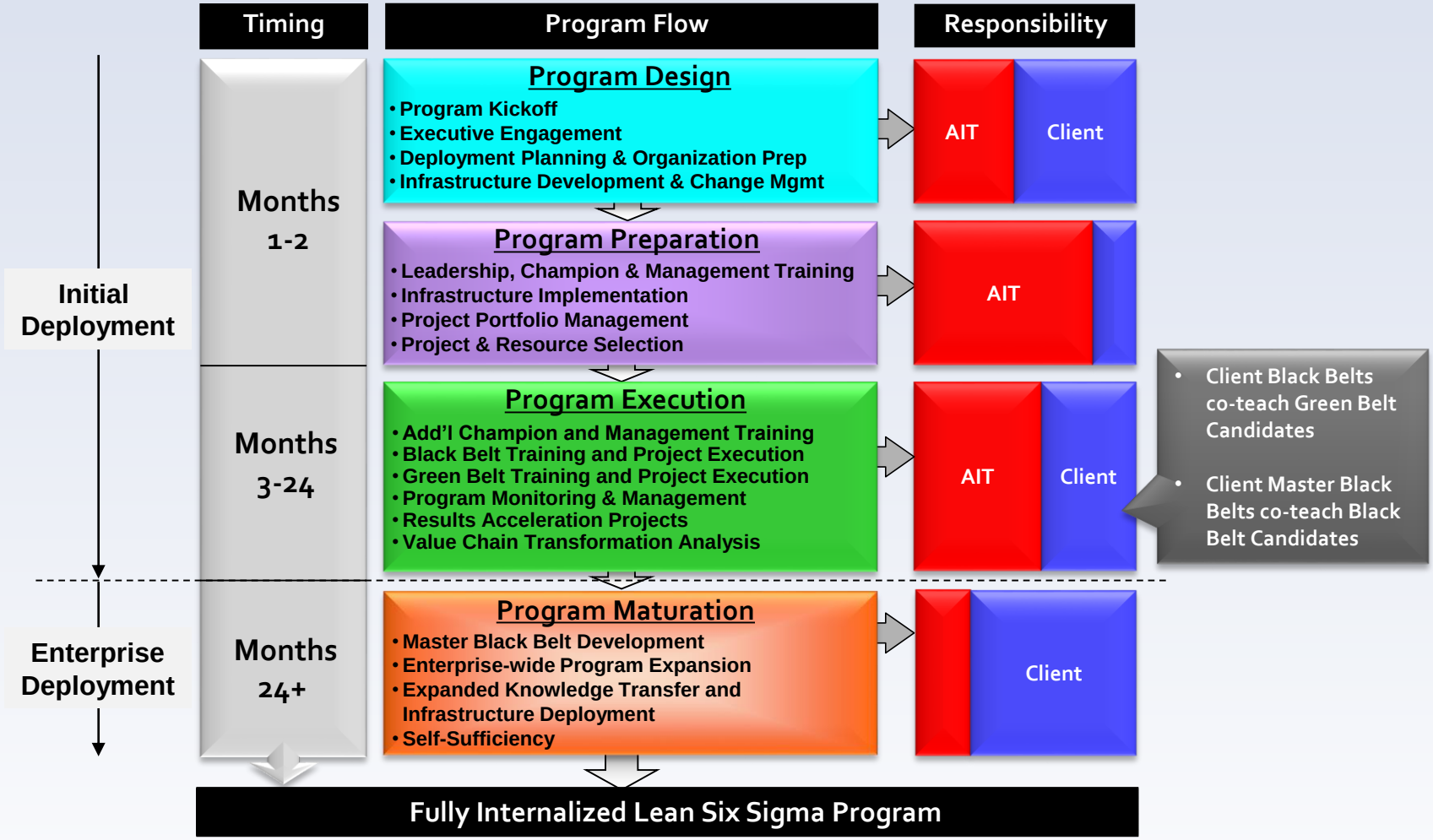
Lean Six Sigma Deployment Model



Deployment Approach that Drives Results … and Self-Sufficiency!

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Program Design (~ 1 Month)

Program Phase	Elements	Activities	Deliverables
Program Design	Program Kickoff	Leadership Awaremess	Introduction to the Leadership Team Review of Program Plan and Key Milestones Establishment of the Executive Steering Committee
	Executive Engagement	Engagement Interviews	Identification of Focus Areas Assessment of Executive Sponsorship Creation of Lean Six Sigma Awareness Training
		Executive Training	Establishment of a Common Vision Identification of Success Factors Understanding of Roles & Responsibilities Understanding of Lean, Six Sigma and Supply Chain Tools & Methodologies Specific Lean Six Sigma Program Success Metrics
	Deployment Planning	Deployment Planning Workshop	Establish and Prioritize Program Goals Define Initial Program Scope Select Program Elements and Quantities Configure Curriculum Requirements Develop Detailed Program Timeline Estimate Program Savings & Payback
	Organization Preparation	Budget & Logistics Planning	Business Case Preparation Budget Authorization Resource Alignment
	Infrastructure Development and Change Management	Deployment Infrastructure Design	Definition of Necessary Deployment Infrastructure to Support Deployment Scope
		Baseline Readiness Assessment	Identification of Program Readiness Gaps Creation of Action Plan to Close Gaps
		HR Process Review	Definition of Standard HR Processes for Candidate Selection, Job Definition, Reward/Recognition and Retention Definition of Belt Certification Processes Development of Career Planning for Belt Candidates / Certified Belts
		Communication Plan Development	Definition of Communication Plan & Tools (ie: townhalls, letters, speeches, e-learning, awareness training, sound-bites, news letters, etc)
		Financial Tracking Process Development	Review of Financial Tracking Capabilities in the Project Management Software Tool Definition of a Standardized Financial Tracking Process and Require Authorizations Documentation of the Financial Tracking and Approval Process including User Guidelines
		Program & Project Management Software Configuration	Requirements Definition and Configuration of Program & Project Management Software Tool
		e-Learning Software Configuration	Requirements Definition and Configuration of the e-Learning Software Tool

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Program Preparation (~ 1-2 Months)

Program Phase	Elements	Activities	Deliverables
Program Preparation	Leadership Training	Education and Deployment Plan Review	Refinement of the Go-Forward Plan Understanding of Leadership Roles & Responsibilities Understanding of Lean, Six Sigma and Supply Chain Tools & Methodologies Knowledge of how to Develop, Validate, and Leverage Belt Resources into the Future Consensus on Infrastructure Design (Communication, IT, Finance, HR)
	Champion & Management Training	Education, Selection & Communication	Definition of Deployment Champion and Management Role & Responsibilities Understanding of Lean, Six Sigma and Supply Chain Tools & Methodologies Establishment of Project & Candidate Support Expectations Understanding of Methodologies for Project and Candidate Selection Knowledge of Project Review and Belt Certification Processes Understanding of Financial Tracking & Verification of Projects
	Infrastructure Implementation	Infrastructure Deployment	Implementation of Standardized HR Support Processes Establishment of Program Review Processes Establishment of Project Review Processes Documentation of Belt Certification Processes Creation of Communication Plan Methods and Tools Establishment of Financial Tracking Process Installation of Standard IT Systems to Support Deployment Review of Post Infrastructure Implementation Readiness and Corrective Action Plan
		Final Pre-Launch Readiness Assessment	Validation of Program Readiness Gap Closure Efforts Final Infrastruction Deployment prior to Program Launch
		Program & Project Management Software Testing	Testing of Program & Project Management Software Tool Training of Adminstrators and Super Users
		e-Learning Software Testing	Testing of the e-Learning Software Tool Training of Adminstrators and Super Users
	Project Portfolio Management	Project Portfolio Definition & Prioritization	Compilation of all Improvement Opportunities Instruction on proper Scoping and Project Chartering Techniques Screening and Identification of "High Priority" Improvement Opportunities Development of Project Charters for all "High Priority" Improvement Opportunities Prioritization of all "High Priority" Project Charters Assignment of Resources: Training Wave Projects or Professional Support Projects
	Resource Selection	Candidate Identification & Transition of Responsibilities	Project Charter Reviews and Identification of Ideal Candidates Candidate Recruitment and Career Planning Transition of Candidates Current Job Responsibilities to Existing Staff

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Program Execution (1-3 Years)

Program Phase	Elements	Activities	Deliverables
Program Execution	Additional Champion & Management Training	Education, Selection & Communication	Definition of Deployment Champion and Management Role & Responsibilities Understanding of Lean, Six Sigma and Supply Chain Tools & Methodologies Establishment of Project & Candidate Support Expectations Understanding of Methodologies for Project and Candidate Selection Knowledge of Project Review and Belt Certification Processes Understanding of Financial Tracking & Verification of Projects
	Lean Six Sigma Black Belt Training and Project Execution	Knowledge Transfer & Project Work	Applied Understanding of the Lean Six Sigma DMAIC Problem Solving Methodology Applied Knowledge of Advanced Lean Six Sigma Tools and Techniques Experience with Project Management and Leadership of Lean Six Sigma Project Teams Achievement of Project Expectations Project Results Tracking
	Lean Six Sigma Green Belt Training and Project Execution	Knowledge Transfer & Project Work	Applied Understanding of the Lean Six Sigma DMAIC Problem Solving Methodology Applied Knowledge of Fundamental Lean Six Sigma Tools and Techniques Experience with Project Management and Leadership of Lean Six Sigma Project Teams Achievement of Project Expectations Project Results Tracking
	Program Monitoring & Management	Monthly Leadership & Deployment Champion Reviews	Review Progress of all Belt Training Waves -- Technical Certification, Project Results, Belt Certification Validate and Track Project Results for the Deployment Scope Award Belt Certifications Select Post-Training Projects and Assign Belt Resources Identify Candidates for Master Black Belt Certification
		Quarterly Executive Steering Committee Reviews	Review Program Deployment Plan and Projected Annualized Results Review Plan vs. Actual -- Belt Training, Project Results (Training Only), Project Results (Post-Training) Review Key Program Metrics and Develop Corrective Action Plans (Deployment focused) Review Results of Semi-Annual Program Health Check and Develop Corrective Action Plans (Infrastructure focused) Review 1-3 Year Deployment Plan -- New Geographies, New Functional Areas (i.e., Product Development, etc.)
		Program Health Check	Evaluate and Plan Infrastructure Capability to Support Deployment Plans Review Program Health Check with the Executive Steering Committee
	Results Acceleration Projects	Professional Support Staffing for Critical Projects	Identify the "Critical" Projects that must be Immediately Staffed and Executed Identify External Professional Support Resources able to Lead and Manage the Project Team Launch and Execute Project using Lean Six Sigma Methodologies and Tools Achievement of Project Expectations Project Results Tracking
	Value Chain Transformation	Phase 1: Framing & Scoping	Define Value Chain Transformation (VCT) Steering Team and Core Team Define VCT Objectives and Project Plan Conduct Kickoff Communication Sessions and Focus Interviews Initiate Supply Chain Definition and Benchmark Activities
	Value Chain Transformation	Phase 2: Analysis & Design	Conduct End-to-End Value Chain Assessment Create Gap Analysis Develop Multi-Level Value Stream Maps of the Value Chain Compile and Prioritize Opportunities Develop Business Case and Align Organization for Change Strategically Aligned & Prioritized Lean Six Sigma Project Portfolio
	Value Chain Transformation	Phase 3: Implementation Planning	Develop the Multi-Year, Time-Phased Transformation Roadmap Utilize Project Portfolio Skills Needs to Drive Resource Development Prioritize and Schedule Transformational Projects to Maximize Benefits

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Program Maturation (1-2 Years)

Program Phase	Elements	Activities	Deliverables
Program Maturation	Lean Six Sigma Master Black Belt Training	Lean Six Sigma Train-the-Trainer Resource Development	Identify Standout Lean Six Sigma Black Belts with Teaching Talent
			Train the Master Black Belt Candidates on Advanced Lean Six Sigma Tools
			Develop Teaching Capability and Intimate Knowledge of Curriculums, Simulations, and Exercises
			Transition Responsibility for Training Material Customization to MBB Candidates
			Co-Teach Lean Six Sigma Green Belt and Black Belt Curriculums
	Program Expansion	Global Deployment	Develop and Execute the Multi-Year, Time-Phased Transformation Roadmap
			Utilize Project Portfolio Skills Needs to Drive Resource Development
			Evaluate Performance of the Transformation against the Benchmarks
		Functional Expansion	Utilize Innovation and Design-for-Six Sigma capabilities in Marketing, Sales & Product Development
			Utilize Transactional Lean Six Sigma in Support Functions, e.g., Legal, Finance, Procurement, etc.
			Utilize Value Chain Transformation Methodology across the Enterprise
	Self Sufficiency	Knowledge Transfer, Program Accountability, & Culture Solidification	Accumulation of Program Management, MBB, and Applied Project Experience to Enable Self-Sufficiency
			Development of Adequate Resources to Drive Future Deployment and Culture Change
			Solidifying a Self-Sustaining Lean Six Sigma Culture

Deployment Approach that Drives Results … and Self-Sufficiency!

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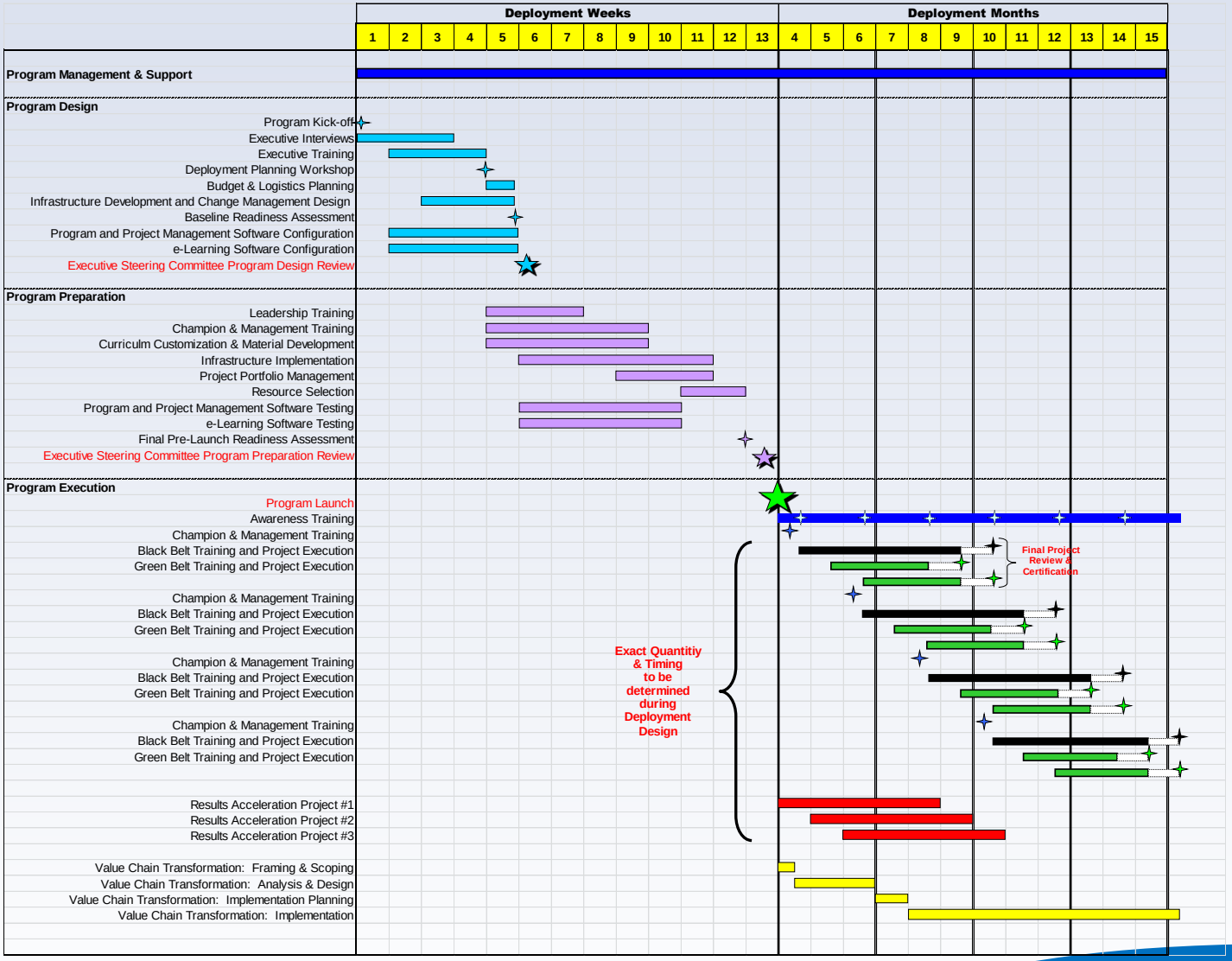
Example Deployment Timeline



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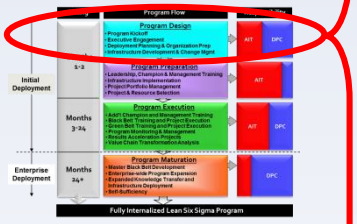
Program Design Process

Deployment Planning Workshop

Program Design



1. ***Establish & Prioritize Program Goals***
   - Program Objectives & Criteria
   - Prioritization of Goals
   - Program Success Metrics
2. ***Define Initial Program Scope***
   - Geographies, Business Units and Functions Involved
   - Target Population Identified
   - Program Support Roles and Responsibilities
3. ***Select Program Elements & Quantity of Each***
   - Project Selection Process
   - Change Management, Infrastructure Support, Readiness Assessments
   - Planning Key Elements (i.e. Executive, Champion, Black Belt, Green Belt, Awareness Training)
4. ***Configure Curriculum Requirements***
   - Lean Six Sigma Integration
   - Transactional / DFSS Specialization
   - Case Study Customization
   - Soft Skills Integration
5. ***Develop Program Timeline***
   - Major Milestones
   - Pre-Launch & Post Launch Activities
   - Timing of Program Phases and Elements
6. ***Estimate Program Savings & Payback***
   - Program Savings for Deployment Scope
   - Payback Estimation Assumptions
   - Break Even Point

Deployment Planning Process Produces a Customized Program

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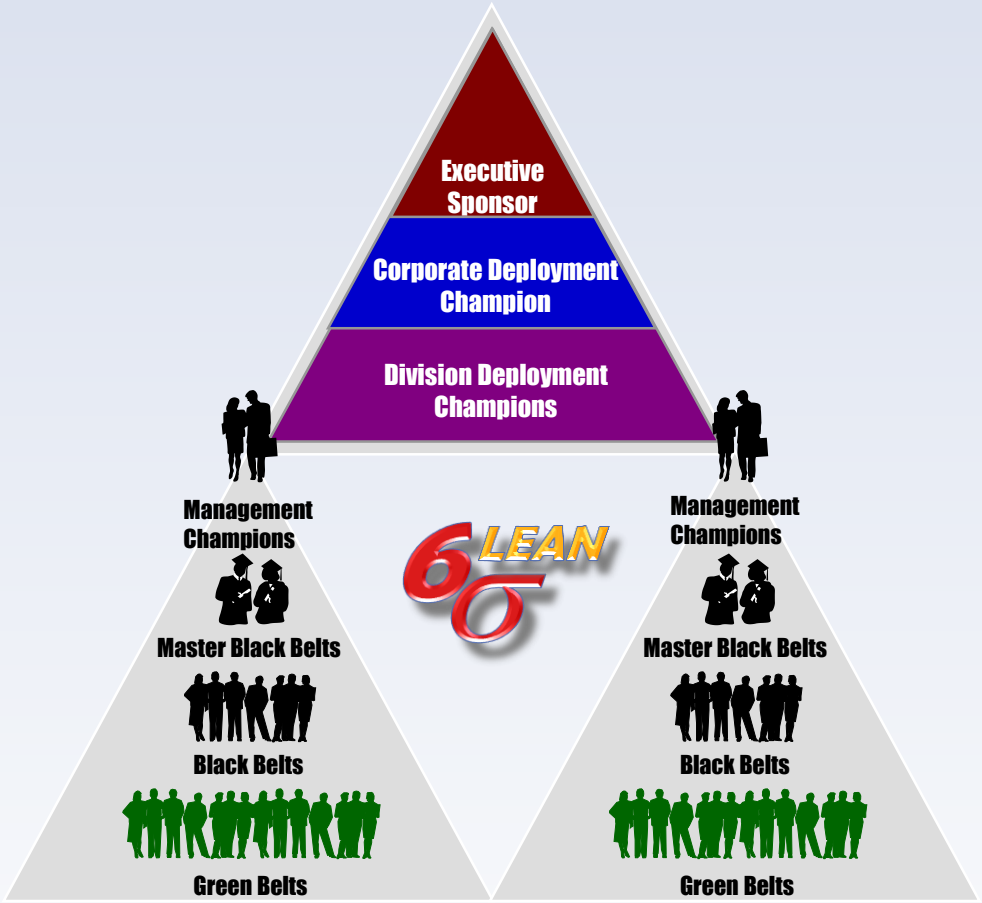
Developing Program Infrastructure



Infrastructure Components

Program Steering Team
- Leadership Coaching and Support
- Project Selection and Prioritization
- Candidate Selection Guidelines
- Program Metrics Development

Corporate Communications
- Communications Strategy
- Communication Tools Development
- Awareness Program

Human Resources
- Reward, Recognition and Retention
- Staffing and Career Planning
- Training Coordination

Information Systems
- Project Tracking Data Base
- Intranet and Web Support
- e-Learning Software

Finance
- Project Savings Calculation
- Project Savings Tracking
- Business Plan Integration

Program Infrastructure is critical … and is often neglected!

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Partner Deployment Support Structure

AIT Global Account Team Leader (ATL)

Steering Committee

Executive Engagement

Infrastructure Development & Deployment

Strategic Opportunity Identification

Curriculum Development & Customization

AIT Europe ATL and Trainers

AIT Americas ATL and Trainers

AIT Asia Pacific ATL and Trainers

Program Design

Function	Roles
AIT Global Account Team Leader	**Single point of contact for global activities:** • Frequent interface with Global and Business Unit Deployment Champions. • Primary AIT focal point for program planning and program management. • Works closely with regional AIT ATL & Trainers.
AIT Regional Account Team Leader	**Single point of contact to for each region:** • Management of account engagement. • Educate and coach leadership team on program content and deployment.
AIT Master Black Belts	**Provide training, coaching and refinement of program material:** • Provide Black Belt and Green Belt technical certification upon completion of project work.

Regional & Site Champions

Program Preparation

Management, Local Champions & Belt Candidates

AIT Master Black Belts

Program Execution

Partner Core Team Provides Consistent Support Throughout Entire Program

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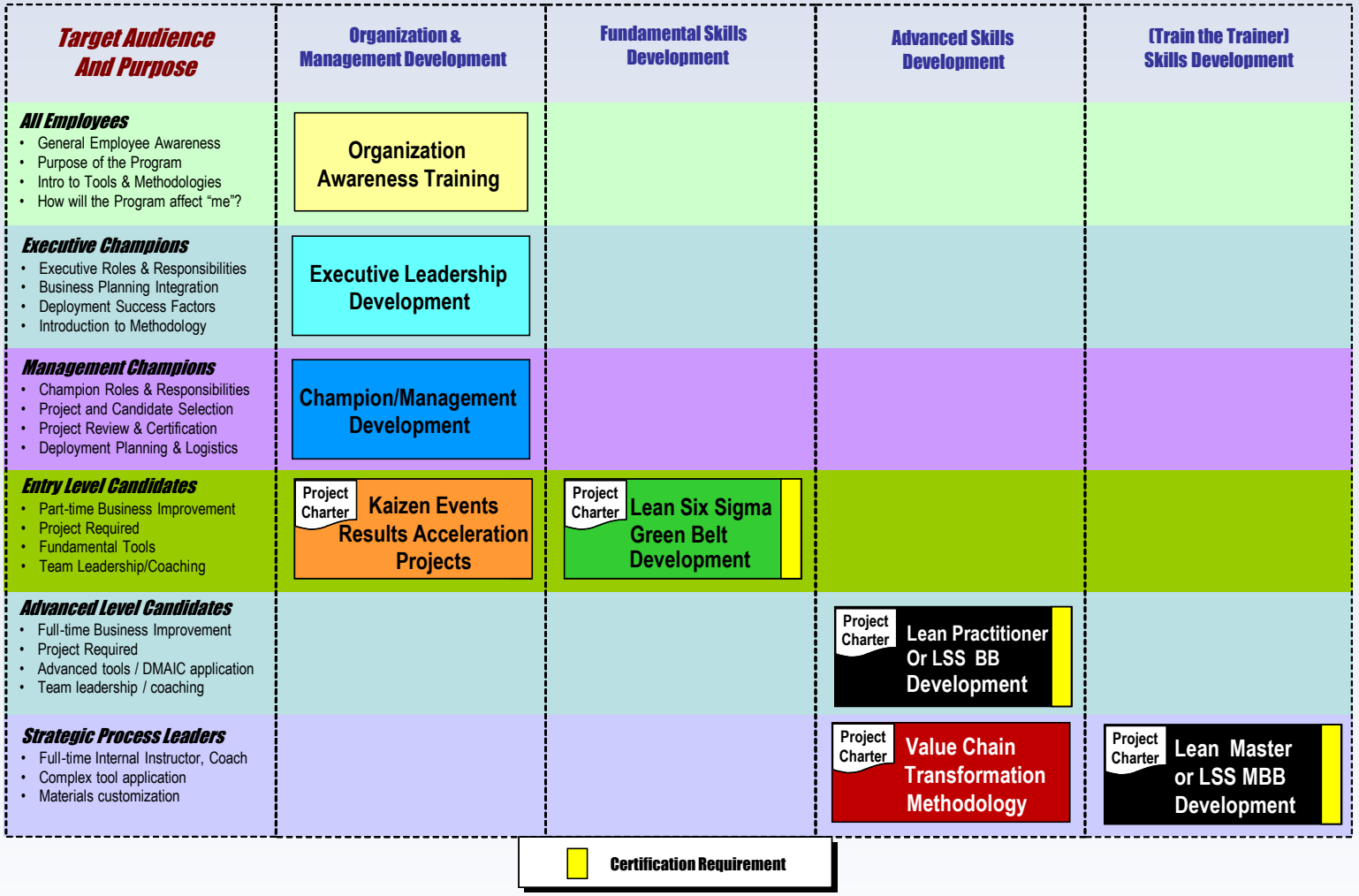
Lean Six Sigma

Project Focused Role-Based Training



Employee Skill Development Using Material Customized for DPC

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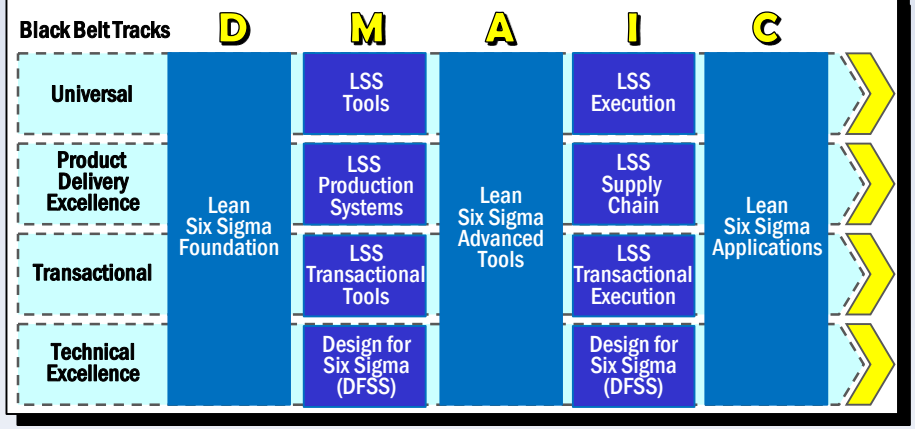
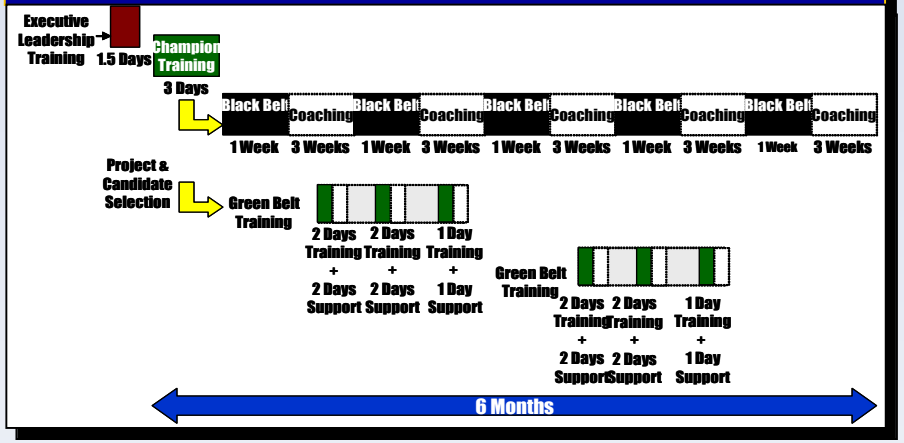
Lean Six Sigma Knowledge Transfer

Train-Apply-Review

Specialization Tracks



Train-Apply-Review

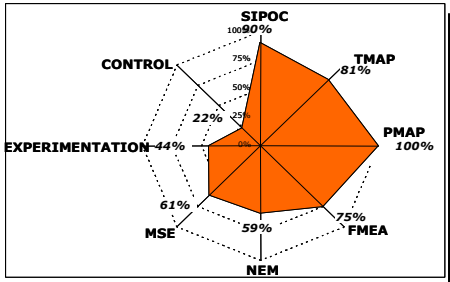


Candidate Selection

- ✓ Good communication skills at all levels
- ✓ Leadership ability
- ✓ Technical / Analytical aptitude
- ✓ Commitment and availability
- ✓ Respected in the organization
- ✓ Good fit with specific project requirements
- ✓ Eager to learn and make a difference

Certification Requirements

- ✓ Technical Competence
- ✓ Project Completion
- ✓ Leadership



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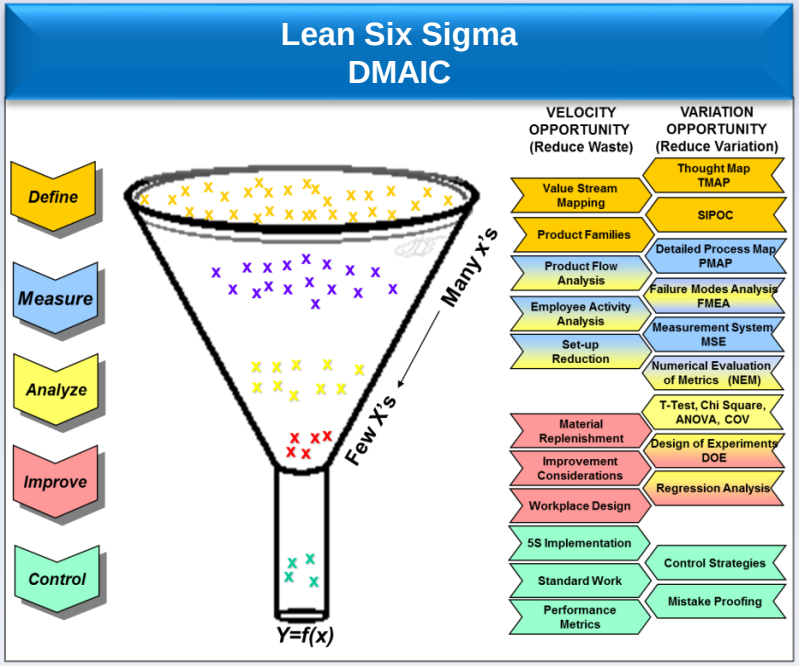
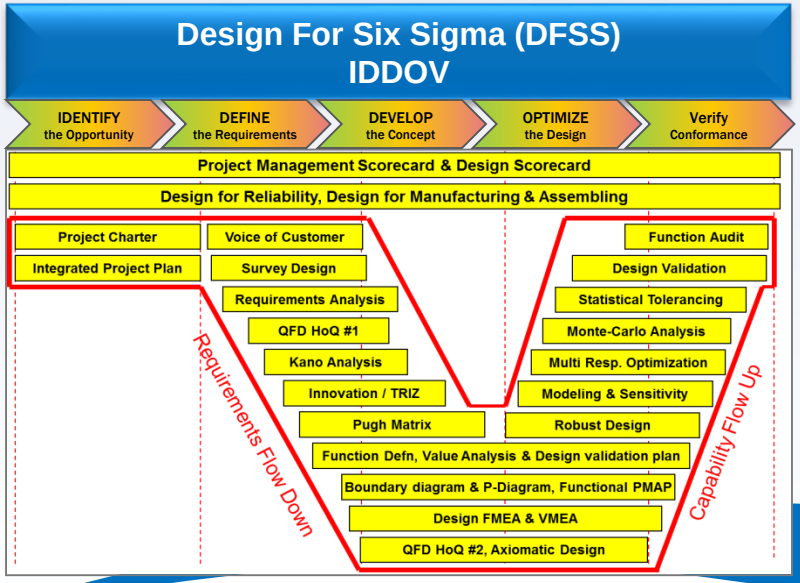
LSS DMAIC and DFSS DMADV Deliverables

1. Establish & Prioritize Program Goals
2. Define Initial Program Scope
3. Select Program Elements & Quantity of Each
4. **Configure Curriculum Requirements**
5. Develop Program Timeline
6. Estimate Program Savings & Payback

Curriculum Will Define Deliverables for Each Course Type





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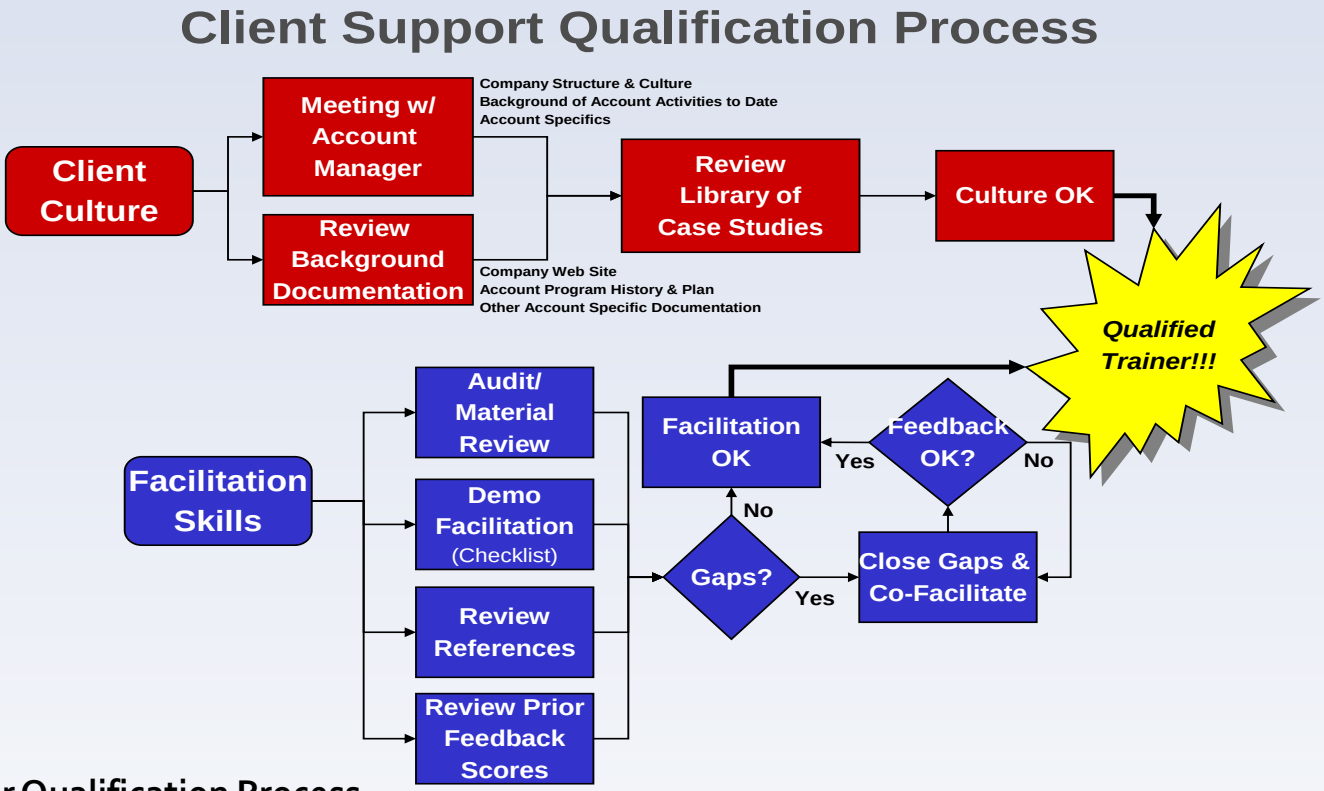
Global Consistency – Trainer Qualification



Instructor Qualification Process

The qualification process consists of the following two elements:

- Gaining an understanding of the company culture
- Demonstrating the ability to facilitate knowledge transfer of the technical tools and client specific curriculum

Prior to any training session client representatives are welcomed to review and approve any instructor that the AIT has selected for a training session

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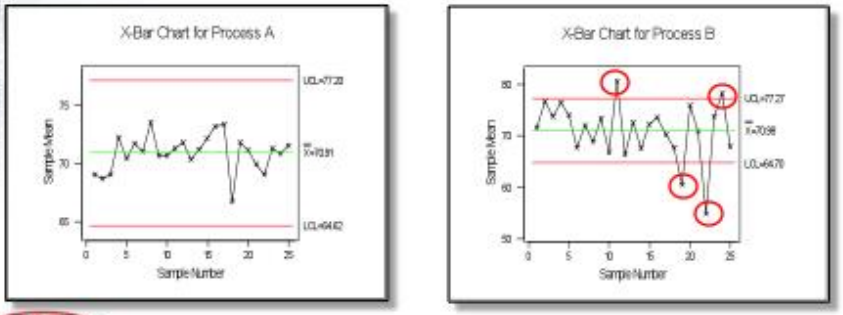
Material Development – Language Extension

Our Process Ensures a Globally Consistent Program

Control Charts

- Process A shows controlled variation.
- Process B shows uncontrolled variation (and special causes)
- Notice how the red lines, which we do not yet understand, tell us when something is special cause or uncontrolled!

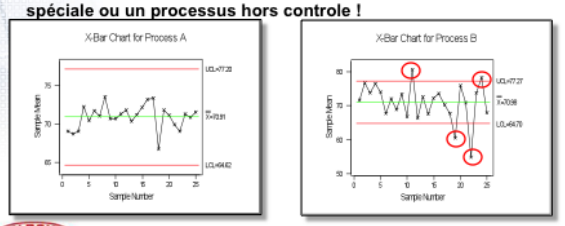


DUPONT Performance Coatings

Data Evaluation Page: 20

Cartes de Contrôle

- Le Process A a une variation sous contrôle.
- Le Process B a une variation hors contrôle (et des causes spéciales)
- Notez comment les lignes rouges dont nous ne connaissons pas encore la signification démontrent la présence d'une cause spéciale ou un processus hors controle !

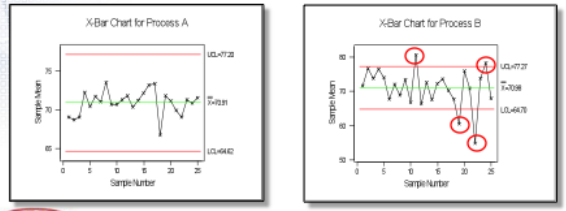


DUPONT Performance Coatings

Data Evaluation Page: 20

Gráficas de Control

- El Proceso A muestra variación controlada.
- El Proceso B muestra variación no controlada (y Causas Especiales)
- Mire como las líneas rojas (que aún no explicamos) nops indican cuando algo es una Causa Especial or no controlada



DUPONT Performance Coatings

Data Evaluation Page: 20

Deployment Planning

1. Establish & Prioritize Program Goals
2. Define Initial Program Scope
3. Select Program Elements & Quantity of Each
4. Configure Curriculum Requirements
5. Develop Program Timeline
6. Estimate Program Savings & Payback

- Client tailored curricula determined during Deployment Planning Workshop including relevant case studies and exercises
- English Version Becomes the "Standard"
- Translation to other languages is from the English "Standard"

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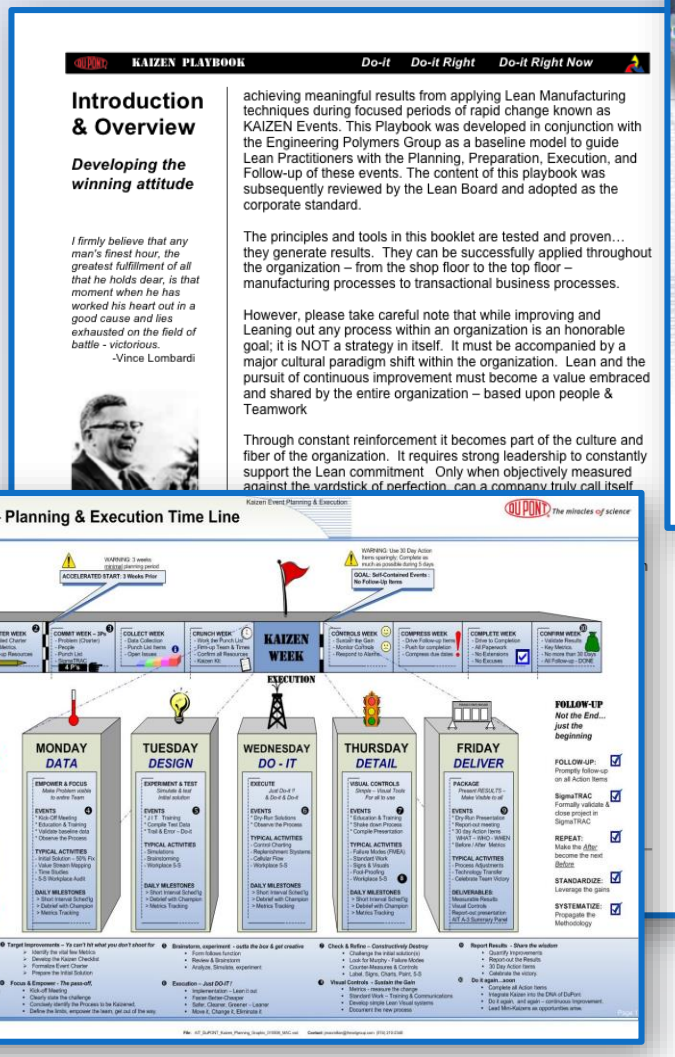
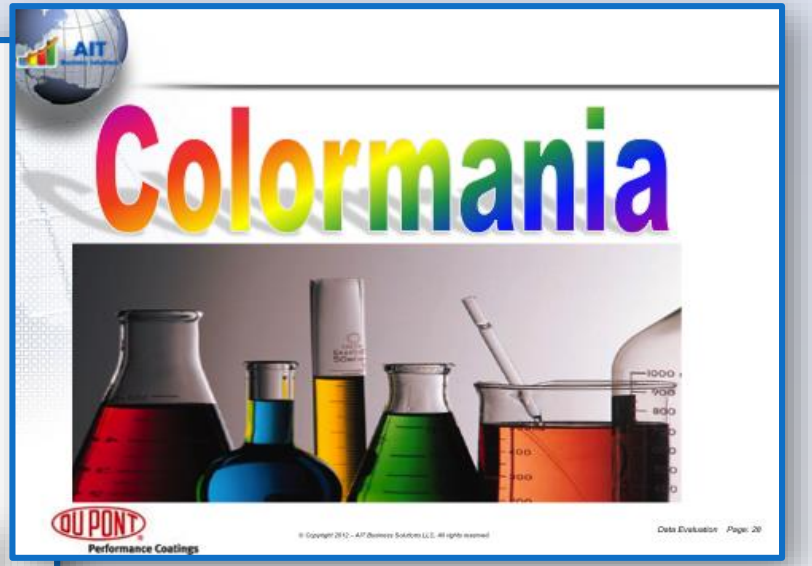
Our Teaching Examples, Case Studies, and Hands on Exercises are tailored to the Customer





The Kaizen Playbook and Colormania Simulations are examples of how AIT customizes materials to the specific needs of our customers.

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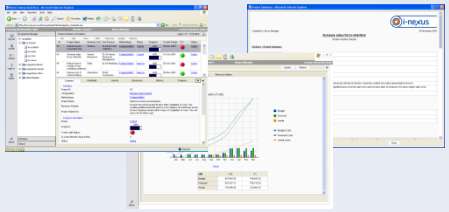
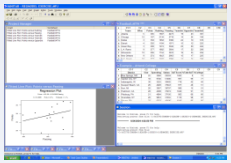
Best-In-Class Software Solutions

Software Category	Solution Partners	Best-In-Class Functionality	World Class Results
Program & Project Management	INSTANTIS POWERSTEERING SOFTWARE i-nexus The Business Execution System		• Accelerated Project Execution • Greater Program and Project Control • Increased Project Success Rates • Reduced Management Overhead
Statistical Analysis	Minitab www.minitab.com JMP The Statistical Discovery Software™		• Accelerated Six Sigma Analytics • Improved Application of Tools • Enable Accurate Statistical Analysis • Documented Project Results
Blended e-Learning	The Quality Group Advancing e-Learning		• Organization Awareness Training • Methodology & Tools Overviews • Preparation For Classroom Training • Refresher Courses

Our Strategy is to Endorse the Best-In-Class Software Solutions for our Clients!

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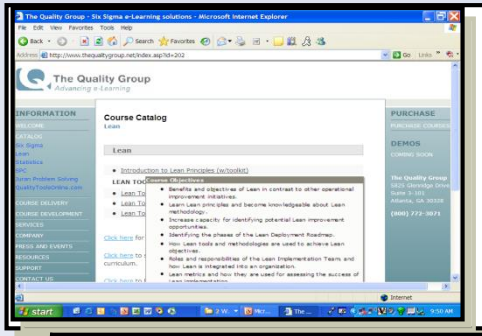
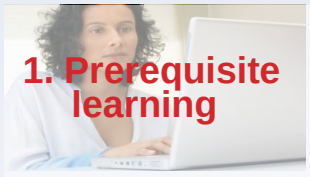
E-Learning Approach & Benefits



- ***E-learning addresses unique training constraints and opportunities***
- ***A web-based 2-4 hour Lean Six Sigma overview answers the questions:*** ***Why Lean Six Sigma?; What is Lean Six Sigma?; Why is it important?***
- ***Customized Client portal enables employee training progress and tracking and learn-at-your-own-pace environment***
- ***Capability to add company specific Lean Six Sigma message from the company's Executive Leadership***



- Offers flexibility: learn anywhere, 24/7
- Accommodates different learning styles
- Learn at their own pace; go back and review

- Access to online learning, reference materials, and job aids
- Increased retention with better knowledge transfer to the workplace
- Mentoring & coaching from the subject matter expert

- Reduced costs (compared to classroom training)
- Better control and consistency in delivery
- Better utilization of resources
- Alignment with business objectives

e-Learning enables culture change with minimal disruption to daily operations

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AIT Business Solutions Differentiators

- ✓ **Proven Global Deployment Partner with Significant Relevant Experience**
- ✓ **Structured Culture Transformation and Change Management**
- ✓ **Deployment Design, Innovation, Flexibility & Partnership**
- ✓ **Methodology Integration & Tailored Curriculum**
- ✓ **Robust Strategic Project Portfolio Alignment**
- ✓ **Relentless Focus on Program Results**
- ✓ **Our People and Experience**

People, Excellence, Integrity

AIT Business Solutions

Questions?
More Information?

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AIT Business Solutions

Appendix Information

References
Sample Curricula

AIT
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High Quality Effective Training

"SKF and AIT's partnership for deploying Six Sigma has reached a maturity that few arrangements have between two organizations… AIT has also been able to expedite our learning curve in our new Six Sigma frontiers, Design for Six Sigma (DFSS) and Transactional Six Sigma. Their expertise in these areas has been very valuable to SKF and is something that we would have struggled to develop internally. AIT's guidance and mentorship has been a key enabler to the success of Six Sigma at SKF."

– Don Lynch, Ph.D, Deployment Champion

Don Lynch, Ph.D., Deployment Champion
SKF USA Automotive
Phone: 734-620-1753
Email: don.lynch@skf.com

AIT Business Solutions

High Quality Effective Training

Honeywell

"AIT's diversified industry experience allows them to understand, relate to and flex to the needs of our various business groups. They are outstanding at responding to the constantly changing needs of a company over 1000x their size. We view AIT as a trusted advisor and valued partner as we continue to evolve our Six Sigma business improvement program"

– Vinny Tuccillo, Global Six Sigma Plus Director

Vinny Tuccillo, Global Six Sigma Plus Director
Honeywell Corporation
1140 West Warner Road, Tempe, AZ
Office: 480.592.4872
Email: vinny.tuccillo@honeywell.com

AIT Business Solutions

High Quality Effective Training

In 2004, Dupont engaged AIT to develop a program that supplemented a mature Six Sigma program with several levels of Lean training. We jointly created a multi-level training curriculum that included a one-day Lean Introduction, a three-day Basics of Lean training and a comprehensive Lean Practitioner course that included facilitation techniques for running successful Kaizen events. AIT consultants led certification classes and Kaizen events that successfully developed several hundred Dupont professionals over a three year period. AIT also lead major Supply Chain focused improvement projects that significantly improved the performance of these end-to-end process areas.

"Historically, DuPont managed by activity. Our Six Sigma projects have achieved impressive results, one project at a time. However, in many cases, the overall process has not improved enough to meet customer needs and deliver required results. We are moving to managing by end-to-end process. We focus on the overall process Y's and Z's to insure that the process meets business and customer requirements. The end-to-end process chosen by DuPont Operations as the transformational target is the end-to-end Supply Chain."

- Keith Holiday, Champion-Business Process Improvement

Reference:
Don Linsenmann, Vice President and Corporate Champion
Dupont Corporation
Office: 302.999.4294

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"I have never seen a company so focused on customer service as AIT, I really mean it. AIT bent over backwards to cater to every whim we threw at them, and they did it with a lot of excitement and positive energy. Working with their solution providers has been a very rewarding experience for me. Their people are a colossal asset to AIT, having unrivaled pride in their work, and they are fanatics when it comes to customer relations. Top-notch MBBs like AIT's are a rarity in the Lean Sigma space."

– Pedro E. Lopez, Director, Continuous Improvement

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High Quality Effective Training

In 2008, AIT was selected by Parker Hannifin to become their worldwide partner for Six Sigma to supplement their well established Lean efforts. Since then AIT has delivered over twenty waves of Black Belt and Green Belt certification waves resulting hundreds of Black Belts and Greenbelts in North America, South American, Europe and Asia Pacific. Parker is characterized as being a highly decentralized organization having tremendous grown through acquisition. Therefore multi-language global consistency was paramount to the ongoing success of the program. In 2011, AIT developed a "Lean Deployment of Design for Six Sigma" program that linked the DfSS development given to employees directly to the actual products currently in development.

Reference:
Todd Kunze, Director of Corporate Quality & Manufacturing Technology
Parker Hannifin Corporation
Office: 216.896.2047
Email: tkunze@parker.com

AIT Business Solutions

Sample Curricula

Five Week Lean Six Sigma Black Belt

	Monday	Tuesday	Wednesday	Thursday	Friday
Session 1 Process Characterization	Class Intro & Expectations Intro to Lean Six Sigma Intro to Variation SIPOC	Thought Process Mapping VOC / Value vs Waste Process Mapping FMEA	Basic Tools - NEM Introduction to Statistics Process Capability Simulation Work	MSE Variable Data MSE Attribute / ICC MSE Attribute / KAPPA Effective Teams	Simulation Closeout Communication of Change DMAIC Quest Go-Forward Actions
	Simulation: Sir Flings-a-lot				
Session 2 Lean	Previous Session Review Lean Overview VOC/Value Stream Mapping Product Families	Product Flow Employee Activity Quick Change Over Kaizen	Material Replenishment Lean Logistics Workplace Design Visual Workplace and 5S	Improvement Considerations Standard Work Performance Measures Mistake Proofing	DMAIC Quest Simulation Closeout Homework Go-Forward Actions
	Simulation: Tube Operations				
Session 3 Data & Statistics	Previous Session Review Process Capability Hypothesis Testing Estimating Variation	T-Test Sample Size Central Concepts in Stats Distributions	Cental Limit Theorem Components of Variation (COV) Analysis of Variation (ANOVA) Regression Analysis	Nested and Crossed Intro to DOE Application of DOE Residual Analysis	Simulation Closeout Homework Review DMAIC Quest Go-Forward Actions
	Simulation: Statapult and y = f(x)				
Session 4 Design of Experiments	Previous Session Review Philosophy DOE Concepts of DOE Full Factorial Design	Fractional Factorial Design Aliasing Experimental Situations I DOE Black Box	Pooling Blocking Expermential Error Simulation Work	Centerpoints DOE Considerations Centerpoints and Replication Simulation Work	Simulation Closeout Homework Review DMAIC Quest Go-Forward Actions
	Simulation: Varminator				
Session 5 Process Modeling	Previous Session Review Improvement Approaches Time Series & Autocorrelation	EVOP Control Strategies Change Leadership	Mixtures Attribute Regression Optimization	Split Plot FRD Distributions and Transforms Chi-Square	Simulation Closeout DMAIC Quest Go-Forward Actions
	Simulation: Chopper Design				

SAMPLE CHAMPION CURRICULA

Day 1	Day 2	Day 3
Intro & Expectations Intro to Six Sigma Deployment success Factors Managing Organization Change Roles & Responsibiities	Project & Candidate Selection Project Tracking Six Sigma Tool Overview SIPOC, TMAP PMAP	Case Study Measures of Success Summary & Comments Next Steps Deployment Challenges

AIT Business Solutions

Sample Curricula

4-WEEK SIX SIGMA BLACK BELT SYLLABUS

Define / Measure / Analyze / Improve / Control

	Monday	Tuesday	Wednesday	Thursday	Friday
Session 1 Process Characterization	Class Intro & Expectations	Thought Process Mapping	Basic Tools - NEM	MSE Variable Data	Simulation Closeout
	Intro to Lean Six Sigma	VOC / Value vs Waste	Introduction to Statistics	MSE Attribute / ICC	Communication of Change
	Intro to Variation	Process Mapping	Process Capability	MSE Attribute / KAPPA	DMAIC Quest
	SIPOC	FMEA	Simulation Work	Effective Teams	Go-Forward Actions
	Simulation: Sir Flings A lot				
Session 2 Data Graphical & Practical Stats	Previous Session Review	T-Test	Cental Limit Theorem	Nested and Crossed	Simulation Closeout
	Process Capability	Sample Size	Components of Variation (COV)	Intro to DOE	Homework Review
	Hypothesis Testing	Central Concepts in Stats	Analysis of Variation (ANOVA)	Application of DOE	DMAIC Quest
	Estimating Variation	Distributions	Regression Analysis	Residual Analysis	Go-Forward Actions
	Simulation: Statapult Y = f(x)				
Session 3 Analyze & Improve / DOE	Previous Session Review	Fractional Factorial Design	Pooling	Centerpoints	Simulation Closeout
	Philosophy DOE	Aliasing	Blocking	DOE Considerations	Homework Review
	Concepts of DOE	Experimental Situations I	Expermential Error	Centerpoints and Replication	DMAIC Quest
	Full Factorial Design	DOE Black Box	Simulation Work	Simulation Work	Go-Forward Actions
	Simulation: Varminator				
Session 4 Process Modeling & Improvement	Previous Session Review	EVOP	Mixtures	Split Plot FRD	Simulation Closeout
	Improvement Approaches	Control Strategies	Attribute Regression	Distributions and Transforms	DMAIC Quest
	Time Series & Autocorrelation	Change Leadership	Optimization	Chi-Square	Go-Forward Actions
	Simulation: Chopper				

Sample Six Sigma Green Belt Curricula

	Monday	Tuesday	Wednesday	Thursday	Friday
Session 1	Introductions & Expectations Intro to Six Sigma Project Charter Reviews SIPOC SIPOC Exercise Thought Process Mapping TMAP Exercise	Process Mapping (PMAP) PMAP Exercise Value Steam Mapping Failure Modes & Effects Analysis Project Action Plans Summary & Evaluations	Project Reviews Basics of Variation Numerial Evaluation of Metrics (NEM) Minitab Basics Project Action Plans	Project Reviews Measurement Systems Evaluations(MSE) Attribute MSE Project Action Plans Face the DMAIC	
Session 2	Week 1 Review Project Review Intro to Hypothesis Testing t-Test Chi-Square	Project Review DOE Philosophy Intro to DOE DOE: Full Factorials DOE Exercise	Project Review Intro to Regression Regression Exercise Residual Analysis	Project Review Performance Measurements Control Strategies Action Plans Summary & Evaluations Training Closeout & Next Steps	

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