Uniworld Consulting, Inc.
Practical Approach, Proven Results

Design for Six Sigma
Service and Process

Efficient processes meeting company needs sometimes miss the changing customer needs

Traditional Six Sigma DMAIC focuses on statistically identifying and analyzing key inputs impacting the critical outputs of the process, creating a better bottom line by reducing cost, variation, waste, resources, and time.

But in many instances, DMAIC can only improve an existing process to a limited extent. New customers, new needs, and the increasingly competitive environment of today's business requires firms to seriously consider redesigning or even designing 'new' processes and services to continue to be competitive.

Process Design for Six Sigma explores the opportunities to better meet both internal and external customer needs. It opens up the opportunity space for the process or service design, and allows the team to create the functions needed for the new process or service.

Integrated Road Map Approach to Design: Define, Concept, Design, Optimize, Verify

The Uniworld DFSS approach ensures that true customer requirements are understood and deployed throughout the new design. The first week of training is attended by both customer facing (if applicable) and internal process participants to minimize the potential for missed requirements and miscommunication throughout the project. In the following weeks of DFSS training, the process team uses practical tools to identify, design, optimize and verify the critical process functions.

The **Define** stage outlines the dimensions of value and quality, identifies the potential internal and external customers, the existing opportunities/gaps, and outlines the customers compelling reason to use or choose the new process design. Charters are outlined with deliverables, teams are selected, and project timing is identified.

In the **Concept** stage, the team conducts visits to understand the customers' environment and captures images and voices to identify true customer requirements. The current process benefits, flow, and hidden costs are studied. Customer Requirements are then deployed into the process system requirements resulting in meaningful process metrics. Structured innovation for process and service occurs against real customer and process functional requirements. Concept selection allows the team to benchmark the new designs against competing alternatives. The selected concept is then designed.

The **Design** stage starts with refining the design for function and flexibility. A new process/service is designed or the current process design is analyzed to identify key process variables and simplification opportunities. Existing process baseline data is gathered. Actions are taken to identify and reduce risks. Simple statistical analysis is used to determine the functional relationship between the desired performance and the critical process design parameters, Y = f (x) relationships.

Optimization recognizes that understanding y=f(x) is not enough. The requirements must produce results robust to variation at minimal cost. The teams further refine the design specifications based on simulation and process pilots ensuring smooth ramp up and launch.

Verification of the critical process performance, capability and flexibility is accomplished in the last phase, allowing the team to predict the performance before full service launch.

Proven Results:

With the DCDOV process, your team creates a successfully launched new process or service delivering true value to the customer, potentially growing the top line of the business. The design has been created in conjunction with a smoothly launched internal operations process, minimizing the bottom line.

Length	15 – 20 days Class room 4 – 7 months Coaching Project completion
Key Participants * 1st week	*Marketing , Service, Sales, Customer Contact*, Finance, Human Resources, IT, Purchasing, Process Designers, etc.
Requirements	Approved Project, Minitab 14 on laptop for weeks 2+
Key Learning Outcomes: **At the end of class, participants will be able to:** • Identify Key Internal and External Customers, Stakeholders and Influencers • Identify and prioritize dimensions of value, quality, perceived gaps • Capture and Translate Customer Voices and Images into True Customer Requirements • Identify Gap areas in expectations, performance, and satisfaction • Create and analyze a map of process and impacted customers, identify opportunity areas • Create a multitude of innovative value enhancing concepts for service or process in a structured manner • Select process and service concepts to develop • Create a compelling reason for customer to use or choose the new process or service • Deploy Customer Requirements into Technical Process Functions and Requirements, Prioritize same • Identify the linkage between the critical inputs (xs) and the critical performance outputs (y) , capture performance growth • Identify Key metrics for process success • Identify, prioritize and minimize risk • Identify measurement system variation • Refine design for functionality and flexibility, simplify • Passively observe and then conduct experiments to identify and then optimize the functional relationships y=f(x) • Predict and then verify performance, flexibility and capability of process or service design prior to launch • Validate and control critical parameters after launch • Explain and apply the applicable DMAIC statistical concepts and tools	
Fourth week options: Key learning outcomes:	• Conduct and analyze design of experiments • Create and statistically analyze a survey with Conjoint analysis
Certification	Successful: • Completion of course work, phased exams, Final exam • Demonstration of knowledge and application of key tools • Project completion and defense Next project started

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