JR AUTOMATION™

Business Transformation through Operational Excellence

Project Title:
Implementing a
Quote Development Process

Best Achievement in Operational Excellence to Deliver Business Transformation

Synopsis

JR Automation is a rapidly growing global supplier of automation equipment. Improving the financial and schedule performance of its business was a key focus in 2018 when JR Automation's CEO and Chairman launched our company-wide strategic initiative: Improve Project Performance.

The initiative consisted of 5 pillars, which collectively produced $10 Million in savings throughout 2018. One pillar was dedicated to improving quote development with a key objective of increasing the business' financial returns on work it wins as well as increase the business' win rate.

An Operational Excellence project was launched to improve the quoting process. A core team of problem solvers documented the informal and varying processes used to produce quote packages at each of the business units. The team worked with leadership to evaulate these processes, identify the best practices, and roll out an optimized and standard process throughout the entire organization.

Utilizing the DMADOV model for Design for Six Sigma and a creative, game-based deployment, the project team developed and launched a new process to over 100 Applications Engineers and business leaders that has been a major factor in significantly increasing the organization's win rate since the Improved Project Performance initiative was launched.

$10 Million in savings in 2018

Improve Project Performance

Team Development | Funnel Management | Quote Management | Program Management | Operational Efficiency

Continuous Improvement

Operational Excellence

Quote Management was a dedicated pillar of JR Automation's 2018 Strategic Initiative to Improve Project Performance.

Define — Measure — Analyze — Design — Optimize — Validate
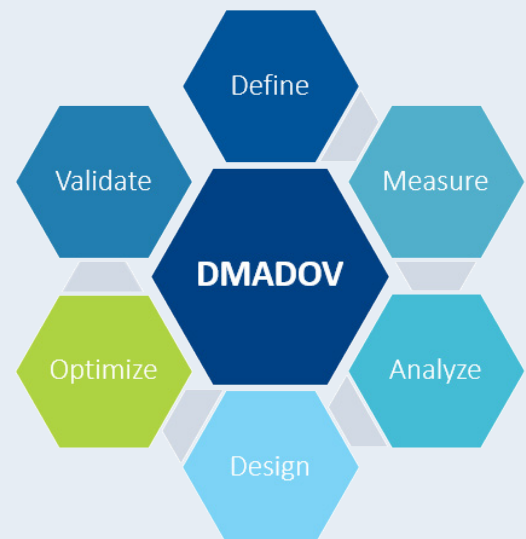
DMADOV

Our team of problem solvers leveraged the **DMADOV model** to guide our decisions in improving our quote packages.

The Project:
Improve and Standardize
the Quoting Process

With new Operational Excellence resources, JR was ready to map the current state of Quoting Process. Our Master Black Belt assembled a core team of problem solvers including Quoting Managers and key executive leaders. The MBB also surveyed key functions in our engineering, operational, and sales teams on positive and negative aspects of our current quoting process – what does the current process deliver?

The team worked together to combine this survey data with similar data received through JR Automation's standard Voice of the Customer survey. Using an affinity diagram, the team transformed that data into a list of key requirements for the new process.

The team assembled for a workshop with business leadership to spend 2 full days reviewing and prioritizing the list of requirements and brainstorming ideas on how to enhance and standardize the process across all business units. Initial scoping exercises shaped the vision, and including executives in this process ensured buy-in and that the process aligned with the company's strategic vision.

The outcome of the workshop and follow-up refinement activity was a **5-phase process** designed to:
- **Increase engagement** with the customer and operational teams
- **Improve the customer experience** by providing better quality and consistency in proposals
- Better **understand and mitigate potential risks** to the success of work won
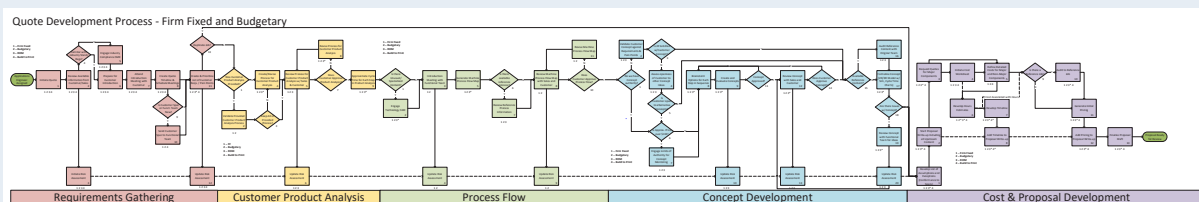
See Attachment #1 for more information on the Quote Development Process.

Implementing the Project through a Game-Based Training Experience

The 5-phase process was documented through the company's ISO documentation system. Each phase in the process exists as its own procedure, reinforcing the individual nature of the unique phases. The real challenge posed with this implementation was training. The team understood how critical training was to a successful implementation, and they sought a training solution that would engage and excite learners.

The Master Black Belt worked with the Employee Development Manager to create a unique and engaging training experience that went beyond classroom-style lectures. The training activity aimed to familiarize all of the Quoters with the new process in a way that was informational and interactive. The end result: **a board game to introduce the process and reinforce the benefits it intends.**

Two-person teams of Quoters work their way through the Quote Development Process during training.
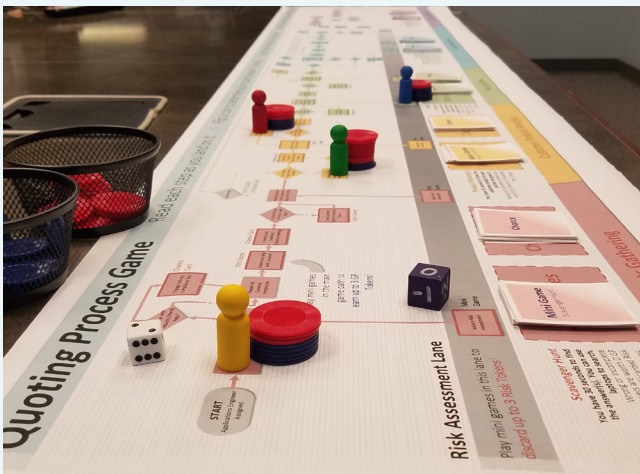
A close-up look at the game board and pieces.

The board game **required players (learners) to say each step out loud as they moved through process**, which caused each step in the process to be read aloud multiple times. Reading, saying, and hearing each step more than once increased cognitive retention.

As players moved pawns through the board, they encountered **"mini-games" that further enhanced active learning**:

- A scavenger hunt that sent players into business systems to find the answers
- Adapted version of Pictionary™ that exposed players to reference work
- Adapted version of Catch Phrase™ that exposed players to key vocabulary terms in the process

The game also integrated concepts from real business situations. Business risk and potential gross profit are represented by red and blue tokens, respectively. Tokens are collected and discarded through mini games and chance cards based on real quoting circumstances.

The board game training experience has received consistent positive feedback based on its close alignment with real business scenarios and its ability to turn process training into a legitimately fun experience.

See Attachment #2 for the full set of rules for the board game.

Results: Improved Business Performance and Problem-Solving Skills

This project contributed directly to increased business and improved understanding of continuous improvement methodology. A key measure of success for quote development at JR is the amount of work won relative to the amount of work bid. This is measured as both Win Rate (% of $) and Hit Rate (% of opportunities). Management was confident that implementing this process was a significant factor in the Win Rate increasing by 14 percentage points and the Hit Rate increasing by 8 percentage points. These percentage increases equate to approximately $140M in increased revenue.
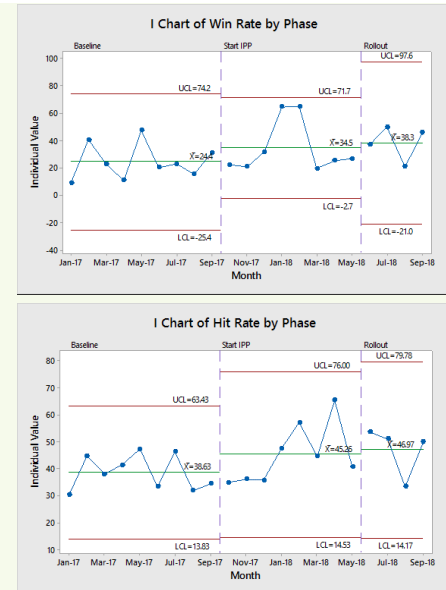
After its most recent transfer of ownership, JR Automation began embarking on a Lean Six Sigma journey. The Continuous improvement team chose to moderate the introduction of Lean Six Sigma tools to the organization by focusing on key projects where they can be involved. This project presented an opportunity to demonstrate the power of specific tools geared more towards Design for Six Sigma in the organization.

Using these tools helped deliver the best process for quote development, and leaders throughout the organization experienced first-hand the benefits they could bring to our business processes.

Additionally, the team recognized that the tools and concepts used to develop this new process could actually be used *in* the quote development process itself. They built opportunities for Process Flow Mapping, Morph Matrices, and Pugh Matrices into the process and provided dedicated training to each of those tools.