

# THE PIVOT PALETTE

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## MISSION

**B**e a premier provider of management consulting services to industry in the high technology, manufacturing / design, services, healthcare, education and government fields.

Be the best partner a business leader can have to help accelerate the move along the path of continuous quality improvement and quality system enhancement, rethinking and changing the way our client's business is done internally and for the marketplace and industry our client serves.

Implement operational improvements across all functions and levels of our client's organization to achieve improved strategic and marketplace position, delivering value added measurable results.

Provide a positive, rewarding, collaborative work environment within PIVOT that fosters personal growth, fulfillment and success for our associates, suppliers and clients.

## VISION

**T**ogether we will. . .

Work to fully understand the requirements of our jobs, the requirements of our clients and the systems that support us.

Provide error free services, analysis information, education and skills training on time to our clients.

Practice ethical, honest and fair behavior in our interactions with clients, associates and suppliers. We will not promise anything we cannot honestly deliver.

Inspire trust and respect by our clients, associates and suppliers, through PIVOT's proven commitment to our mutual success.

Have fun!

## BEST PLANTS

### EVALUATING INDUSTRY WEEK'S BEST 25

**Q**uality performance, on-time delivery, productivity improvements and profitability are some of the criteria used by judges for the Industry Week's Best 25 Plants in North America.

On an average, the finalists report first pass yields of over 96% and an on-time delivery rate greater than 98% - far higher than the average US rate of 91% and 93% respectively. However, in looking for the best 25 plants, Industry Week judges also look for strategies and tools that fuel future results. They look for customer focus, empowered work teams, application of new technologies, implementation of lean concepts and strategies for ongoing improvement.

Leadership also plays a strong role: are manufacturers strategies focused on competition or learning from competition to better serve customers and fuel growth, thus offering a competitive edge.

The top 10 plants (profiles are available on the website for Industry Week) selected this year are:

Boeing C-17 Production Complex  
Collins & Aikman, Americus Operation  
Collins & Aikman, Athens, Tenn., Operation  
Collins & Aikman Rantoul Products Plant 1  
Dana Corp.  
DST Output  
Honeywell Control Products  
ISP Chemicals Inc.  
Medtronic Inc., Xomed  
Webster Plastics

The ongoing journey to World Class at one company included four key elements:

1. TRAINING, TRAINING AND MORE TRAINING. This included teaching everyone in the company the principles of "lean," training the supervisory staff,

conducting an employee survey, designing a demand-flow process (the process of responding directly to customer demand rather than building inventory to a forecast) using kanban signals, conducting kaizen events, and training the employees to use the new kanban system before full deployment.

2. SOWING THE SEEDS OF CHANGE: MANAGEMENT RESTRUCTURING. The company went through a comprehensive transition from using hourly rated shift leaders to the establishment of salaried-exempt supervisor position. We recently completed that transition, eliminating 25 shift-leader positions and replacing them with 10 supervisors.

3. SCRUTINIZE INVENTORY, ASSESS PROGRESS. The owners realized that to maintain leadership positions in their markets the principles of lean manufacturing as manifested in the Toyota Production System must be fully integrated into the fabric of their organization. In about eight months, the company was able to achieve: Inventory Reduction: 30.9%, Productivity Improvement: 26.4%, Scrap Reduction: 78%, Quality Returns Reduction: 49.1%, Inventory Turns Improvement: 200%, Employee Turnover Rate Reduction: 69.1% , OSHA-Reportable Lost-Workday Rate Reduction: 54.2%, Order Fulfillment Rate: Sustained in the low 90% range.

4. DON'T IGNORE SAFETY. World-class companies don't ignore safety; they place it high on the list of priorities.

5. IMPLEMENT TOTAL QUALITY MANAGEMENT. Although any company wishing to take giant leaps of improvement would start with TQM, they chose to put this off because, even though their company was ISO 9000 certified, they discovered that they did not have viable, repeatable processes in place- this is a must before you can start talking total quality!

## JIT STILL A-OK

**J**IT (just-in-time) delivery, in which plants receive frequent deliveries of parts and materials in small lots timed to production, has saved manufacturers millions of dollars in inventory carrying costs. But the logistics turmoil of the Sept. 11 terrorist attacks and this fall's labor disputes on the western waterfront of the US exposed a problem with JIT -- with little or no materials on hand, plants can be immediately idled by delayed deliveries.

The West Coast docks dispute caused plant shutdowns for lack of inventory for manufacturers using JIT delivery; however, they say they'll stick with JIT. It's a matter of the good far outweighing the bad. The nature of JIT may be altered, but it is here to stay. Companies are not willing to pay for facilities to hold a couple of months of inventory in the event this happens again.

## EVERYBODY, SOMEBODY, ANYBODY, AND NOBODY

**T**his is a story about four people named Everybody, Somebody, Anybody, and Nobody.

There was an important job to be done, and Everybody was asked to do it. Everybody was sure Somebody would do it. Anybody could have done it, but Nobody did it. Somebody got angry about that, because it was Everybody's job. Everybody thought Anybody could do it, but Nobody realized that Everybody wouldn't do it. It ended up that Everybody blamed Somebody when Nobody did what Anybody could... Sound familiar? Do watch out for these four people!

## GOING LEAN

**P**ublished by Lean Enterprise Research Centre, Cardiff Business School, UK, [Going Lean](#) was developed during the Lean Processing Programme (LEAP) which ran from 1997 to 2000. The programme was sponsored by the Engineering and Physical Science Research Council (Innovative Manufacturing Initiative) and a network of UK automotive/steel supply chain firms and designed to extend Lean Thinking into this particular group of firms and their associated customer base. Over a three year period it has sought to make radical and incremental change both within and between the firms as well as at a

network level. Specific improvements have been made: better understanding of customer requirements, improved learning culture in the firms, faster reaction time, improved delivery performance, reduced new product time to market, better quality product, improved productivity and increased business opportunities. Key topics include: The lean vision and the lean principles , Understanding waste, Setting the direction. Understanding the big picture, Detailed mapping, Getting suppliers and customers involved , and Checking the plan fits the direction and ensuring buy-in. You can read more about this publication at [www.cf.ac.uk/carbs/lom/lerc/centre/goinglean.pdf](http://www.cf.ac.uk/carbs/lom/lerc/centre/goinglean.pdf)

## GE'S SIX SIGMA STRATEGY

**T**o achieve Six Sigma quality, a process must produce no more than 3.4 defects per million opportunities. An "opportunity" is defined as a chance for nonconformance, or not meeting the required specifications. This means we need to be nearly flawless in executing our key processes. Six Sigma is a vision we strive toward and a philosophy that is part of our business culture.

### Key Concepts of Six Sigma

At its core, Six Sigma revolves around a few key concepts.

- Critical to Quality: Attributes most important to the customer
- Defect: Failing to deliver what the customer wants
- Process Capability: What your process can deliver
- Variation: What the customer sees and feels
- Stable Operations: Ensuring consistent, predictable processes to improve what the customer sees and feels
- Design for Six Sigma: Designing to meet customer needs and process capability

### Our Customers Feel the Variance, Not the Mean

Often, our inside-out view of the business is based on average or mean-based measures of our recent past. Customers don't judge us on averages, they feel the variance in each transaction, each product we ship. Six Sigma focuses first on reducing process variation and then on improving the process capability. Customers value consistent, predictable business processes that deliver world-class levels of quality. This is what Six Sigma strives to produce. Read more at GE's web site:

[www.ge.com/sixsigma/sixsigstrategy.html](http://www.ge.com/sixsigma/sixsigstrategy.html)

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## GLOSSARY OF TERMS & DEFINITIONS

### QUALITY APPROACHES AND MODELS

**DFSS** – (Design for Six Sigma) is a systematic methodology utilizing tools, training and measurements to enable us to design products and processes that meet customer expectations and can be produced at Six Sigma quality levels.

**DMAIC** – (Define, Measure, Analyze, Improve and Control) is a process for continued improvement. It is systematic, scientific and fact based. This closed-loop process eliminates unproductive steps, often focuses on new measurements, and applies technology for improvement.

**Six Sigma** – A vision of quality which equates with only 3.4 defects per million opportunities for each product or service transaction. Strives for perfection.

### QUALITY TOOLS

**Control Chart** – Monitors variance in a process over time and alerts the business to unexpected variance which may cause defects.

**Defect Measurement** – Accounting for the number or frequency of defects that cause lapses in product or service quality.

**Pareto Diagram** – Focuses on efforts or the problems that have the greatest potential for improvement by showing relative frequency and/or size in a descending bar graph. Based on the proven Pareto principle: 20% of the sources cause 80% of any problems.

**Process Mapping** – Illustrated description of how things get done, which enables participants to visualize an entire process and identify areas of strength and weaknesses. It helps reduce cycle time and defects while recognizing the value of individual contributions.

**Root Cause Analysis** – Study of original reason for nonconformance with a process. When the root cause is removed or corrected, the nonconformance will be eliminated.

**Statistical Process Control** – The application of statistical methods to analyze data, study and monitor process capability and performance.

**Tree Diagram** – Graphically shows any broad goal broken into different levels of detailed actions. It encourages team members to expand their thinking when creating solutions.

### QUALITY TERMS

**Black Belt** – Leaders of team responsible for measuring, analyzing, improving and controlling key processes that influence customer satisfaction and/or productivity growth. Black Belts are full-time positions.

**Control** – The state of stability, normal variation and predictability. Process of regulating and guiding operations and processes using quantitative data.

**CTQ: Critical to Quality (Critical "Y")** – Element of a process or practice which has a direct impact on its perceived quality.

**Customer Needs, Expectations** – Needs, as defined by customers, which meet their basic requirements and standards.

**Defects** – Sources of customer irritation. Defects are costly to both customers and to manufacturers or service providers. Eliminating defects provides cost benefits.

**Green Belt** – Similar to Black Belt but not a full-time position.

**Master Black Belt** – First and foremost teachers. They also review and mentor Black Belts. Selection criteria for Master Black Belts are quantitative skills and the ability to teach and mentor. Master Black Belts are full-time positions.

**Variance** – A change in a process or business practice that may alter its expected outcome

Read more on the GE website: [www.ge.com/sixsigma/glossary.html](http://www.ge.com/sixsigma/glossary.html)

## Stuck on Excellence?

How often have you thought that your boss will never be satisfied with your work? Or are you one of those bosses? Or is it that you have been doing something so well, have achieved excellence and are now bored with the same? Perhaps it is time to examine this mindset and get unstuck.

If we take a moment to reflect on our previous moments of excellence, we may be surprised to see how our constant drive for excellence has actually created an environment of mediocrity! How does this happen? By creating fear! Fear that nothing you do will be good enough for the boss! Fear that no matter what you do, you may have to do it again! Fear prevents us from achieving excellence and we get stuck in mediocrity. We become accustomed to the fact that we can never meet the expectations of the boss, that we will never be as good as s/he expects, and we give up. Even if we were to achieve excellence today, it is very likely to be mediocrity tomorrow.

So if being stuck on excellence in these demanding times can be detrimental, and when customers demand nothing but the best, what is one to do?

Start reaching for Brilliance! Start looking for the exceptions, the approaches, the levels of performance, that could truly be called Brilliant. Identify those things that are unique, that enable you to stand out, to differentiate you from the pack, and make a difference.

And then what happens? Does this become the new 'buzzword' or 'mantra'? Besides what happens when we get stuck on 'Brilliance'?

Forget the buzzwords! You may want to 'reach for Brilliance.' Because this, at the least, suggests movement rather than stagnancy. We need to be moving - improving mentally and spiritually! Once we reach a certain point (e.g., excellence, brilliance) gravity may still bring us down. However, by focusing on

improvement, we can still propel ourselves to go back up! A few acts of change a day can keep us from getting stuck on anything - be it excellence or brilliance. How we improve customer service, how we treat people, how we keep the energy of our employees or peers going . . . all contribute to growth and keep us from getting stagnant!

So, forget slogans and buzzwords, and think. Think back what you have done today to keep yourself from getting stagnant. Raise the bar for yourself and think what you can change tomorrow to keep yourself from being stuck on excellence. . . or Brilliance. And then act!

*Are you Stuck on Excellence?*

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*Six Sigma Master Black Belt*

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