

Industry Practice Leader KEYNOTE



Gary Griffith

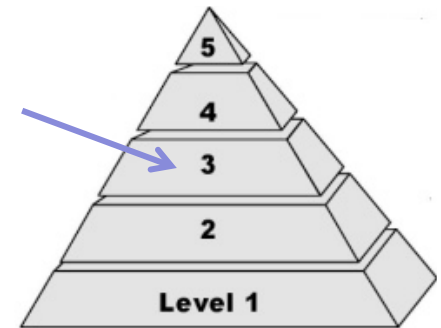
Industry Practice Leader, Workforce Development

Gary Griffith has 40+ years of consulting experience in the manufacturing, quality, aerospace, and automotive, and medical industries throughout the U.S. and Europe with impressive results.

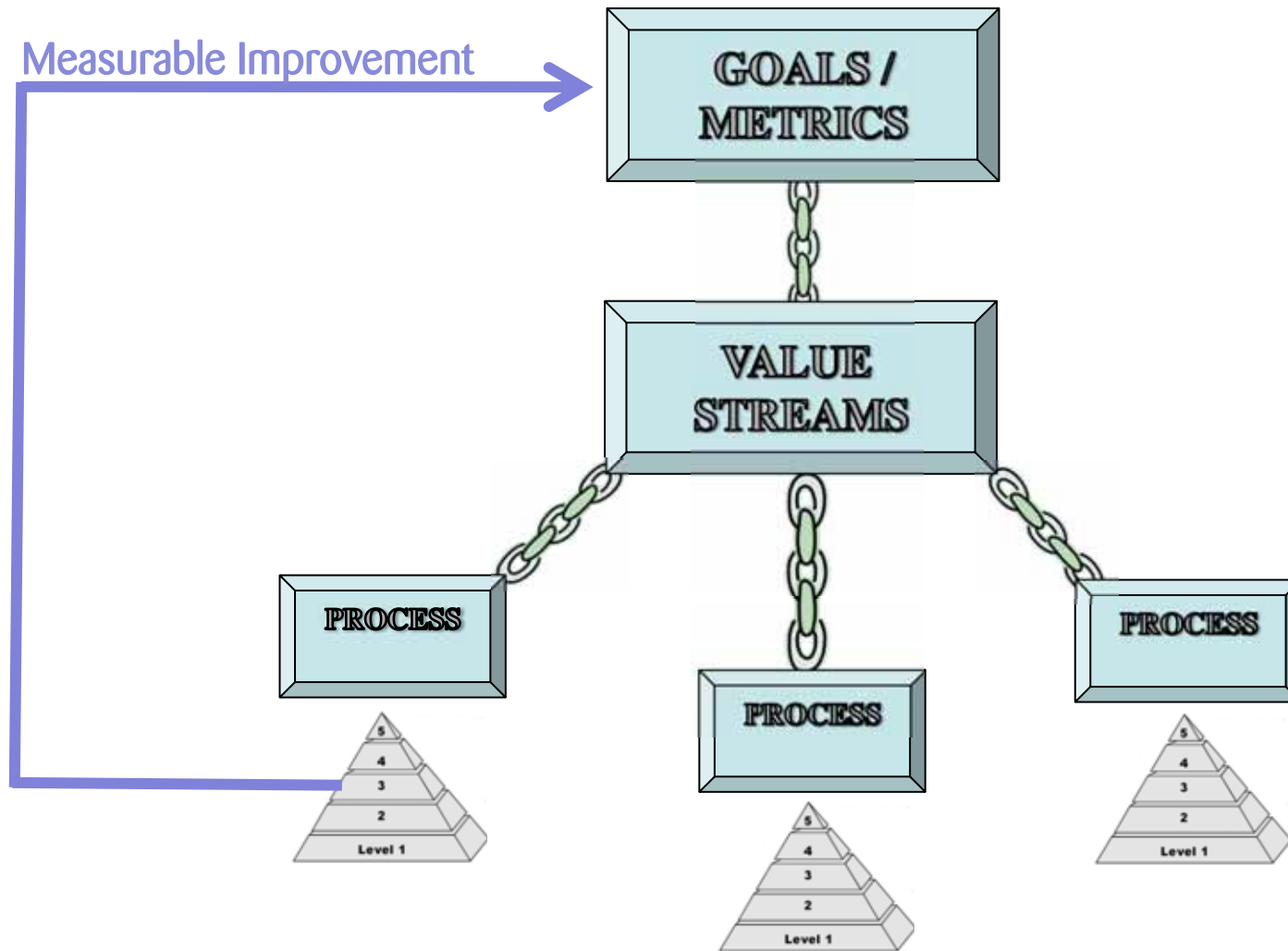
Gary helped an aerospace manufacturer reduce scrap on brazed assemblies from 10.5 percent to less than one percent and reduced rework from 38 percent to 17 percent in six months. Through problem solving training in the manufacturing area, he helped a company reduce a three-year machine shop trend of 18 percent scrap to 1.3 percent in only two weeks. He assisted a medical firm in the redesign of one of their surgical implants which eliminated field failures, increased design tolerances, and improved reliability on medical component parts.

WHAT'S PROCESS GOT TO DO WITH IT?

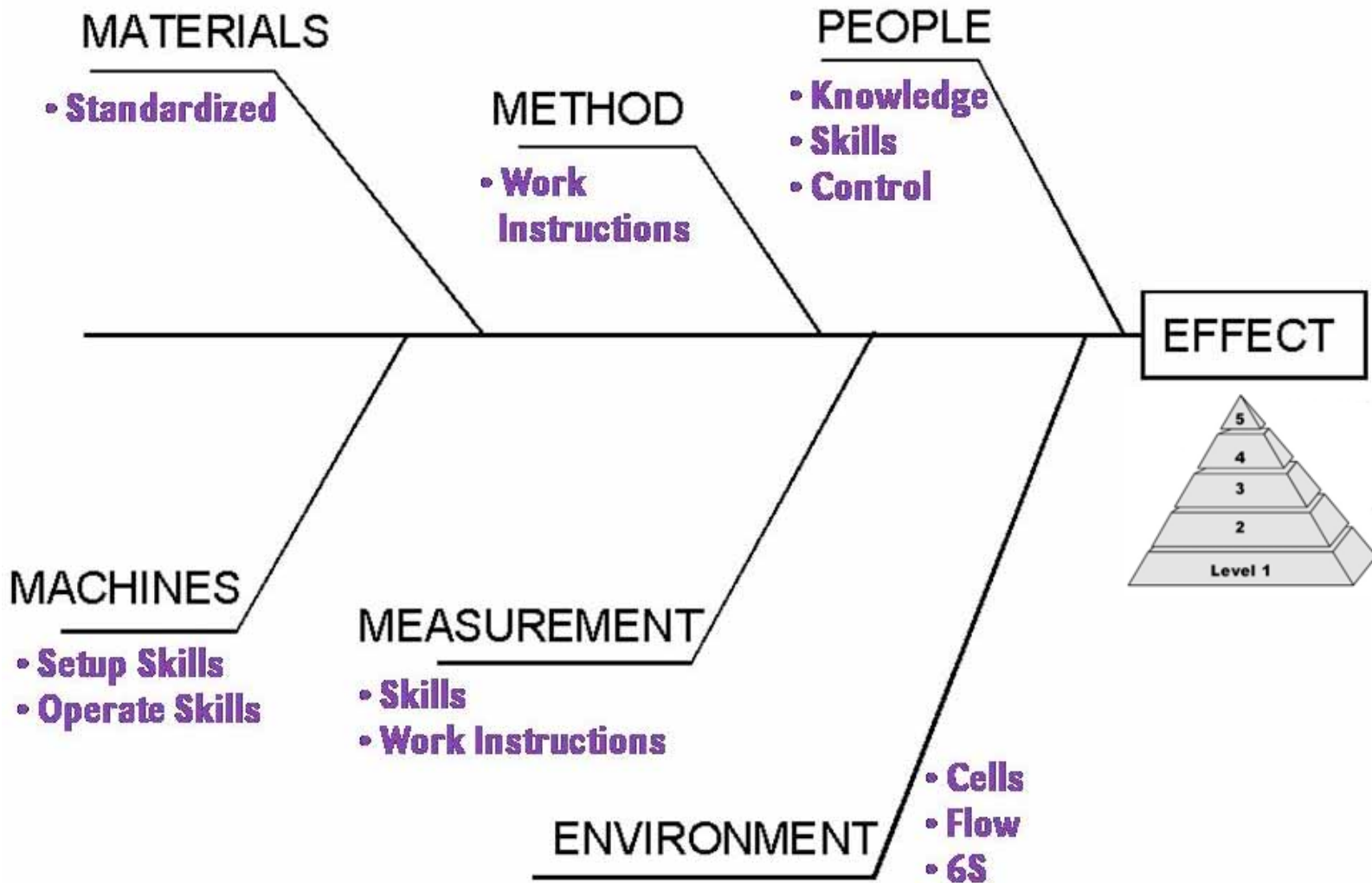
- All problems can be rooted down to one or more processes in a Value Stream
- Immature processes have many noise variables such as:
 - Tribal Knowledge
 - Inconsistent Methods
 - Low to moderate people skills
- Any single noise variable is a potential root cause cause of errors in yield, cycle time, setup time, etc.
- Process Maturity stabilizes the process, eliminates noise



Linkage Gets Results

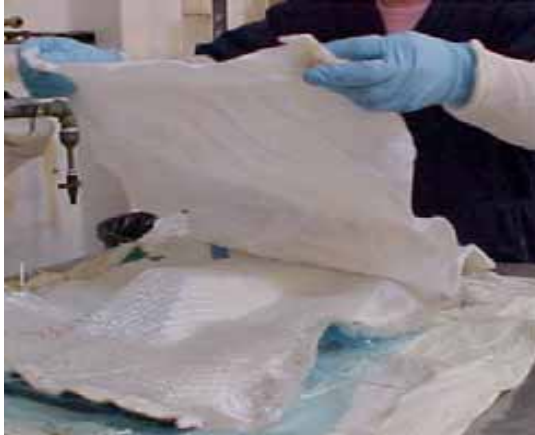


A Process Perspective



Process Maturity Applies – Any Process

Bagging



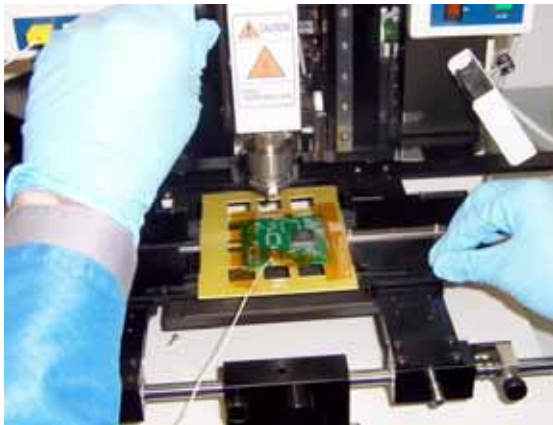
Broaching



Turning



Machine Soldering



Measuring



Assembly

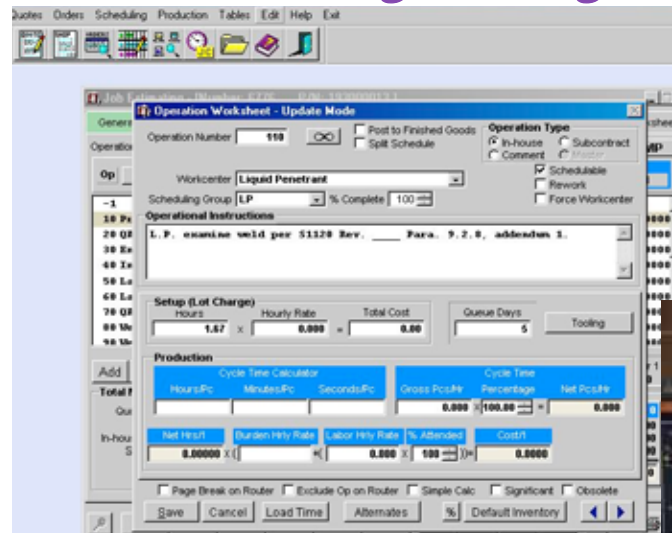


Maturing Business Processes

Order Entry



Manufacturing Planning



Programming



People are part of the Process

→ WFD Implements Job Skills Training and Cross Training

→ For improved operator performance

→ Defines the skill set

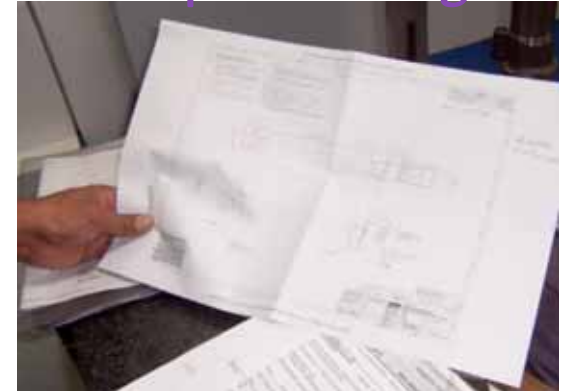
→ Knowledge

→ Skills

→ Train and certify to the skill set

→ Knowledge and skills improved

Blueprint Reading



Measuring & Gaging



Maturing Processes & People

BEFORE	AFTER
Training – OJT only (“Buddy” System)	Formal Training – Certified Personnel
Poor Cycle Time/Variance	Improved Cycle Time/Reduced Variance
Poor Setup Times/Variance	Improved Setup Times/Reduced Variance
Tribal Knowledge Rampant	Process Stabilized (One Right Method)
Poor First Pass Yield (FPY)	Improved FPY
High Quality Failure Costs	Reduced Failure Costs
Poor On-Time Delivery	Improved On-Time Delivery
Only <u>one</u> qualified operator	Cross Training Implemented

In many cases, the above improved simultaneously

One Case Study – Level 3 Implemented

→ Assembly Value Stream (Four Processes)

- Cycle Time Reduced (72 ± 6 Hrs. down to 48 Hrs. ± 30 Min.)
- Scrap Reduced by 82%
- Cross Training Implemented (No longer one deep)
- Upward Mobility for Operators (cross trained / upgraded from within)
- Improved first pass yield >98% (all four processes)
- On-Time Delivery Improved (from 62% to 91%)
- Functional Test FPY Improved (from 71% to 94%)

Standard Work and Tailored Job Skills
Training made the difference!

Process Maturity Levels – Managed Processes

A Sample of Some Suppliers

