Hoshin Kanri

Arvind Srivastava
Corporate MBB/IE, Accuride Corp
FOUR (4) Time AME Manufacturing Excellence Site Winner
2017 Industry Week Best Manufacturing Plant
MBB, CQA, IATF Lead Auditor, Bill Liberman Honoree (ASQ)

™
ACCURIDE

Content Developed by:
Jd Marhevko
SVP QLMS & EHS, Accuride Corp

Canadian Manufacturers & Exporters

Learning Objectives

Across this time we will…

- Tactically apply Define, Measure, Analyze, Improve and Control (DMAIC) to link Lean Management System (LMS) strategies to that of the organization via Hoshin Kanri
- Review KPI establishment wrt business strategy
- See how this tool can be applied to any business
- Increase your understanding of how to develop, manage and execute a strategic plan via a Steering Committee…to Control the process

What You Will Walk Away With….

A Definition of Lean

PURPOSE OF LEAN

Customer Satisfaction

GO

STOP

CONTINUOUS
KAIZEN
IMPROVEMENT

"PULL" THROUGH-OUT SYSTEM

QUALITY AT THE SOURCE

TOOLS OF LEAN

CORE OF LEAN

EMPLOYEE SATISFACTION
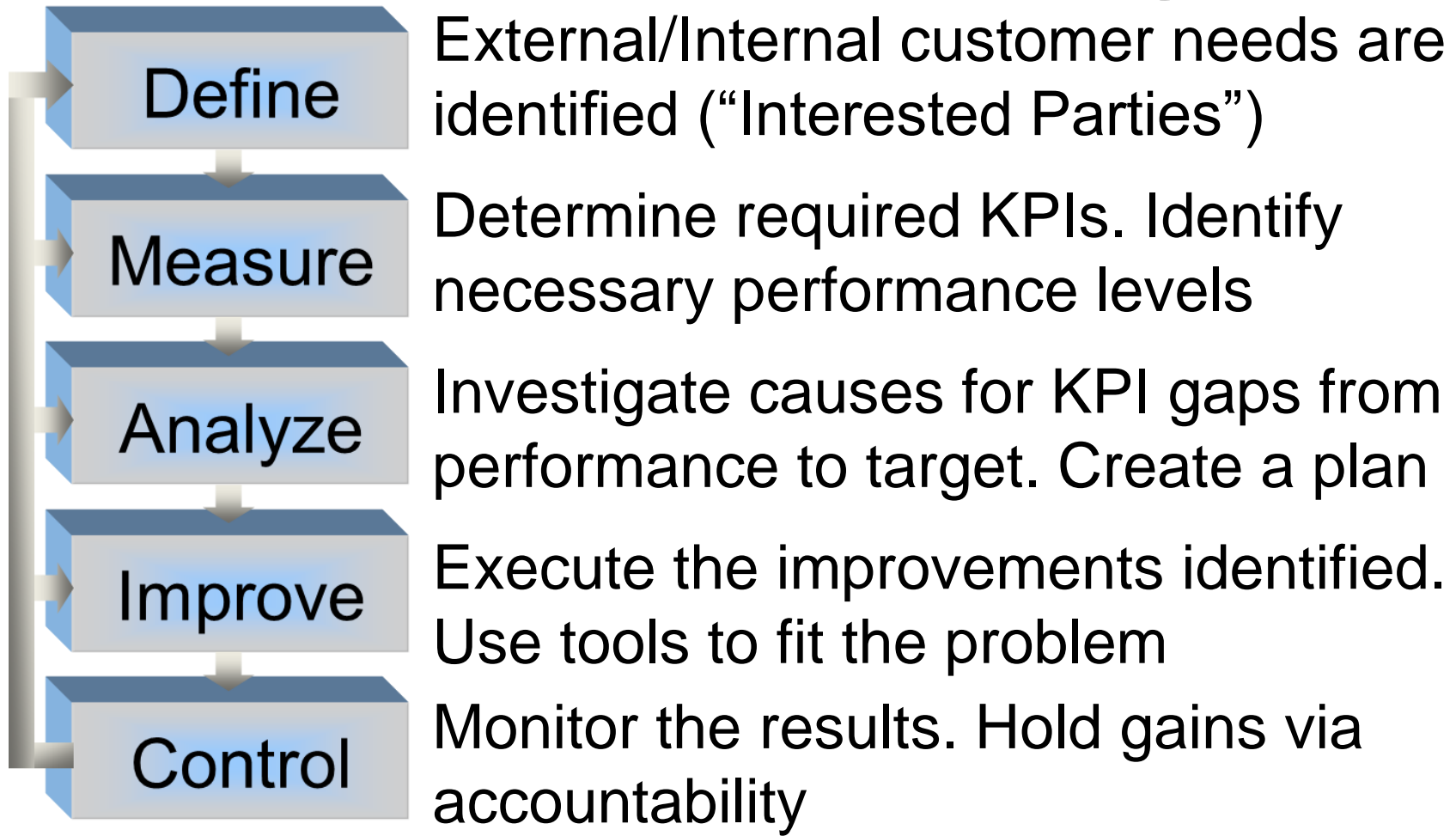STABILITY, RELIABILITY
STANDARDIZED WORK
5S
TEAMWORK

Lean is *FLOW* through pull. It uses an enterprise-wide set of concepts and tools. Lean strengthens an organization's competitive advantage realized from operating its processes

Canadian Manufacturers & Exporters

Elements for Lean Success
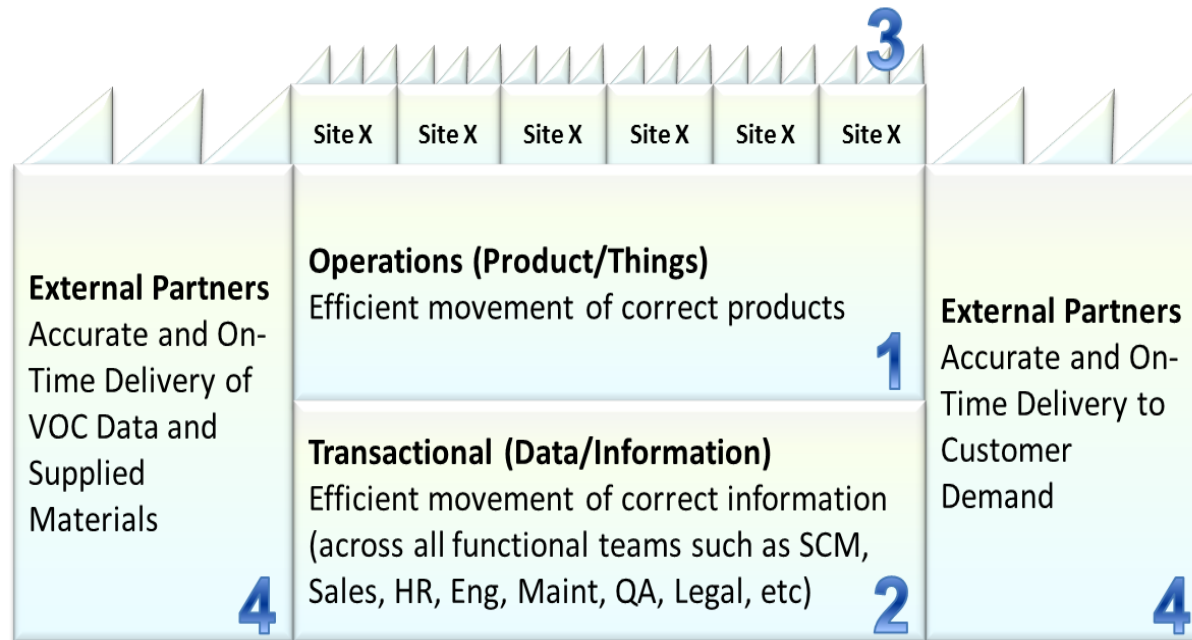
1. Lean "Operations". Effective, Efficient flow of **Product/Things**
2. Transactional systems: Effective, Efficient flow of **Data/Information**
3. Align Product & Transactional Value Streams across the **Enterprise**
4. Incorporate **External Partners**: Customers, Supply Chain, etc.
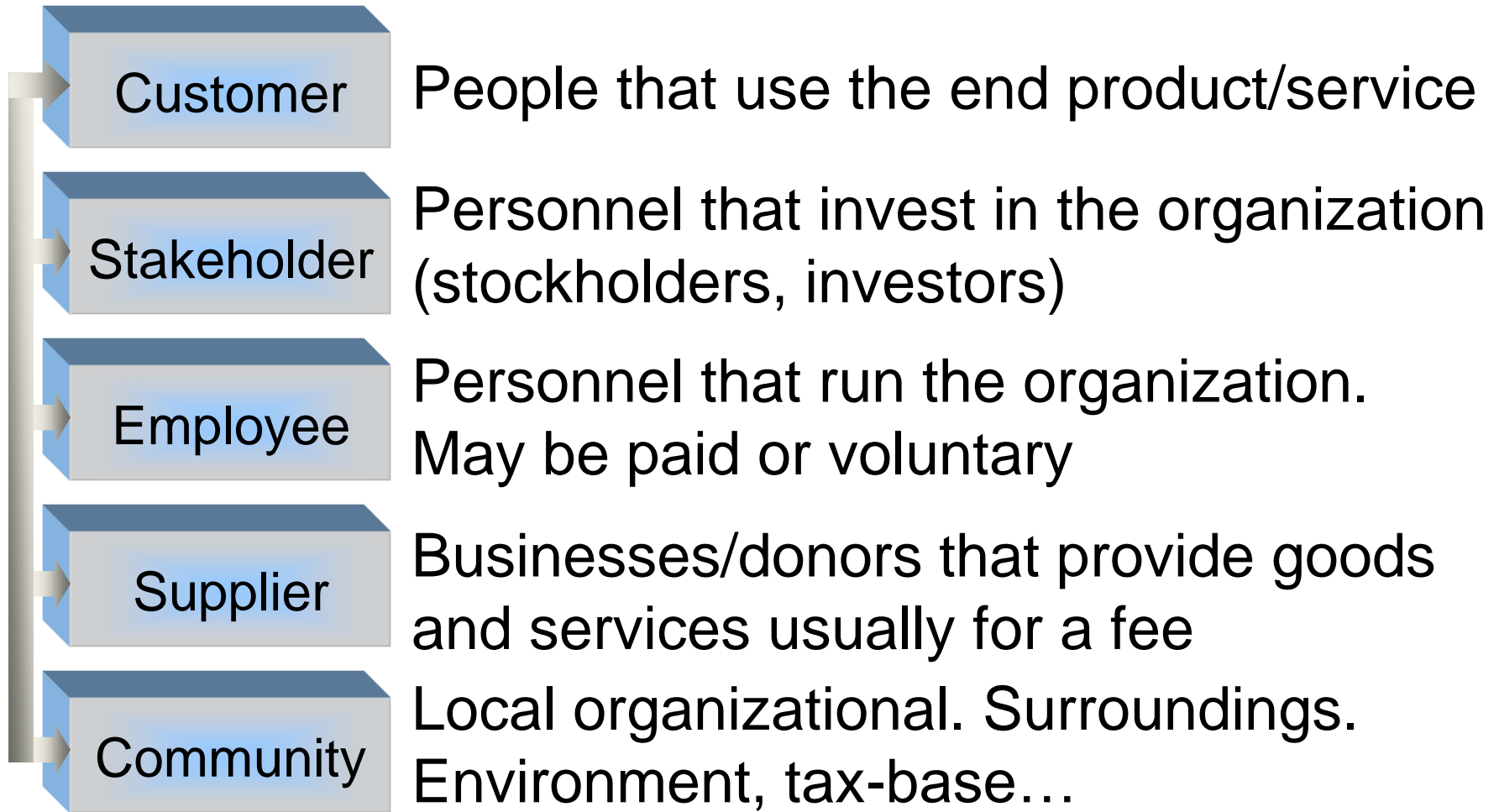
Lean & DMAIC: Strategically

Define — External/Internal customer needs are identified ("Interested Parties")

Measure — Determine required KPIs. Identify necessary performance levels

Analyze — Investigate causes for KPI gaps from performance to target. Create a plan

Improve — Execute the improvements identified. Use tools to fit the problem

Control — Monitor the results. Hold gains via accountability

Define

It isn't what we don't know that gives us trouble,
it's what we know that ain't so

Will Rogers

"Interested Party*" Strategies

Customer — People that use the end product/service

Stakeholder — Personnel that invest in the organization (stockholders, investors)

Employee — Personnel that run the organization. May be paid or voluntary

Supplier — Businesses/donors that provide goods and services usually for a fee

Community — Local organizational. Surroundings. Environment, tax-base…

Interested Party Worksheet

Customer _____

Stakeholder _____

Employee _____

Supplier _____

Community _____

Interested Party Needs

Customers, Stakeholders, Employees, Suppliers and the Community:

What are their strategic, business, and governance needs?

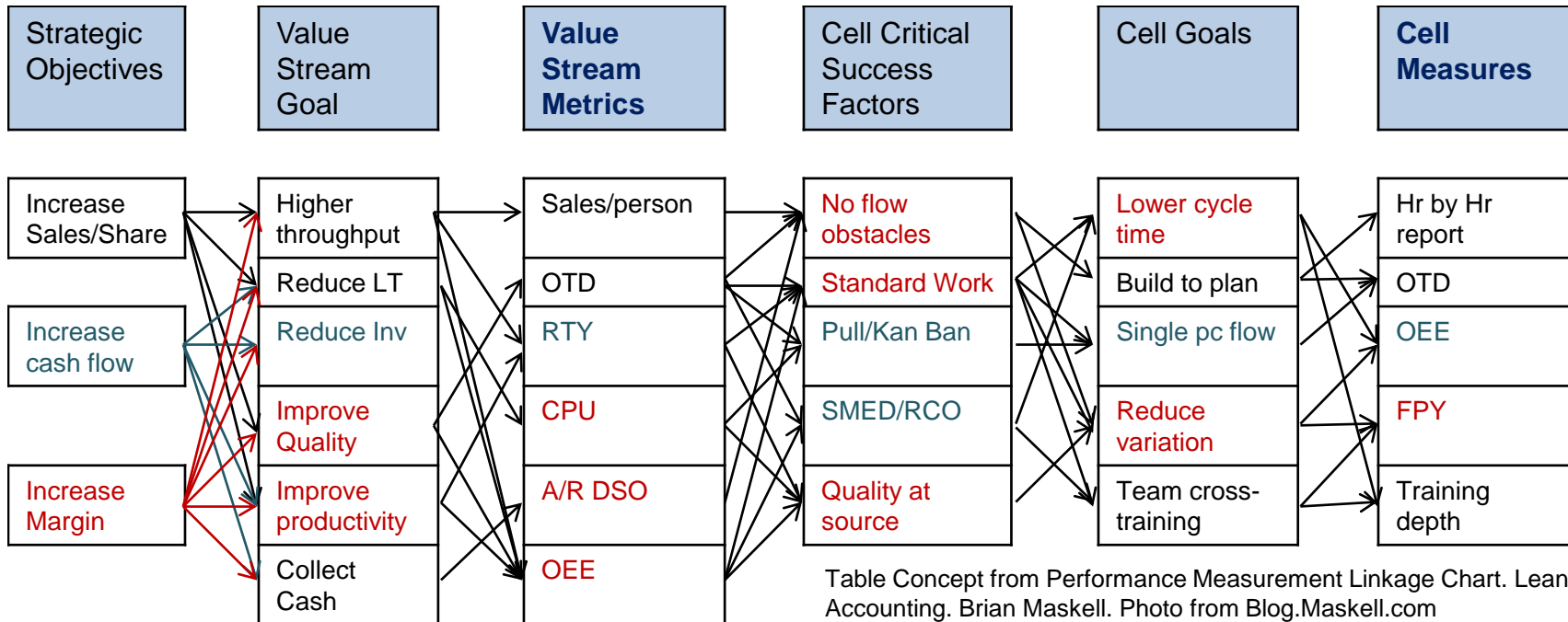| External	Internal
Social	Governance/Strategic Objectives
Cultural	Organization Structure
Political	Rules/Authorities
Legal	Policies
Regulatory	Resources: Capital
Financial	Resources: Human
Technological	Resources: Time
Economic	Technological
Natural Environment	IT/Infrastructure
Competition: National/Intl	Culture
Trends	Contractual Relationships
Stakeholder Relationships	Information Flows

Canadian Manufacturers & Exporters

What Do Interested Parties Want?

Who	What Do They Want?	How Do You Know?
Customer	QCD, Intrinsic Requests (Value, Data Bases, etc), Engineering Systems, etc	Customer Specific Requirements (CSRs), Purchase Orders, Prints, etc
Stakeholder	SMT$ (Show Me The Money), Sales/Growth, Conversion, etc	Strategic Plan, Governance directives
Employee	Security, Safety, Engagement, etc	Surveys, discussion
Supplier	Orders/Growth, on-time payment, reliability, etc.	Surveys, discussion
Community	Social responsibility, compliance, tax-base, etc	Regulatory criteria, Chamber of Commerce, etc
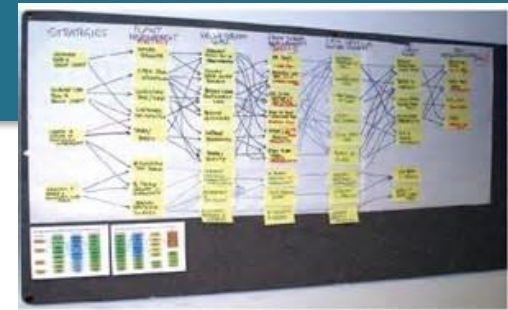
Linking KPIs

KPIs need to matter. One method is to start from the strategy and create the linkage to the cell. See the X-Matrix for a graphical type of format.

Strategic Objectives	Value Stream Goal	**Value Stream Metrics**	Cell Critical Success Factors	Cell Goals	**Cell Measures**
Increase Sales/Share	Higher throughput	Sales/person	No flow obstacles	Lower cycle time	Hr by Hr report
	Reduce LT	OTD	Standard Work	Build to plan	OTD
Increase cash flow	Reduce Inv	RTY	Pull/Kan Ban	Single pc flow	OEE
	Improve Quality	CPU	SMED/RCO	Reduce variation	FPY
Increase Margin	Improve productivity	A/R DSO	Quality at source	Team cross-training	Training depth
	Collect Cash	OEE			

Table Concept from Performance Measurement Linkage Chart. Lean Accounting. Brian Maskell. Photo from Blog.Maskell.com

Canadian Manufacturers & Exporters

Linking KPI Worksheet

Create a horizontal linkage matrix for the following strategy: Increase Customer Satisfaction

| Strategic Objectives	Value Stream Goal	**Value Stream Metrics**	Cell Critical Success Factors	Cell Goals	**Cell Measures**

The "X-Matrix"

A Process to convert *Strategy* to *Reality* by using both <u>horizontal</u> and <u>vertical</u> alignment in the organization
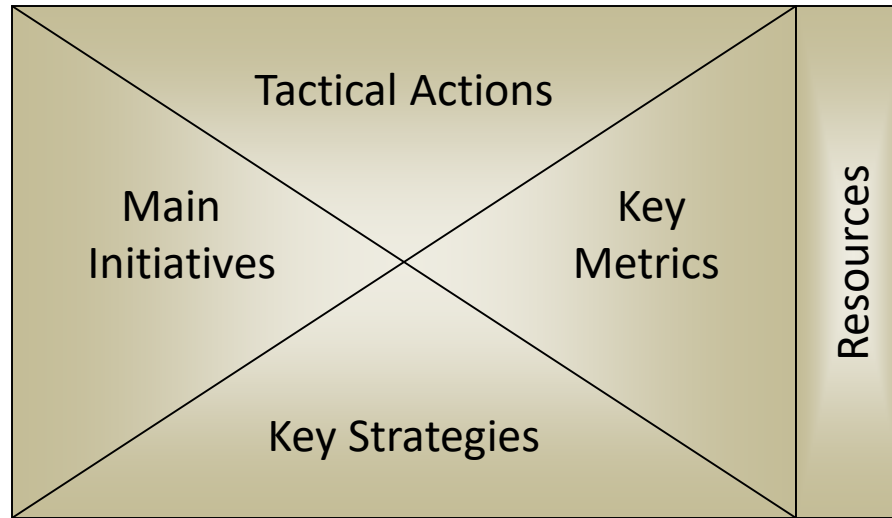
CEO's 3-5 year Strategic Vision

Planning across Division(s).
Vertically supports CEO and Sites

Site planning. One year tactics to support and execute the strategy

CEO

Div 2

Div 1   Div X

Site 2   Site 4

Site 1   Site 3   Site X
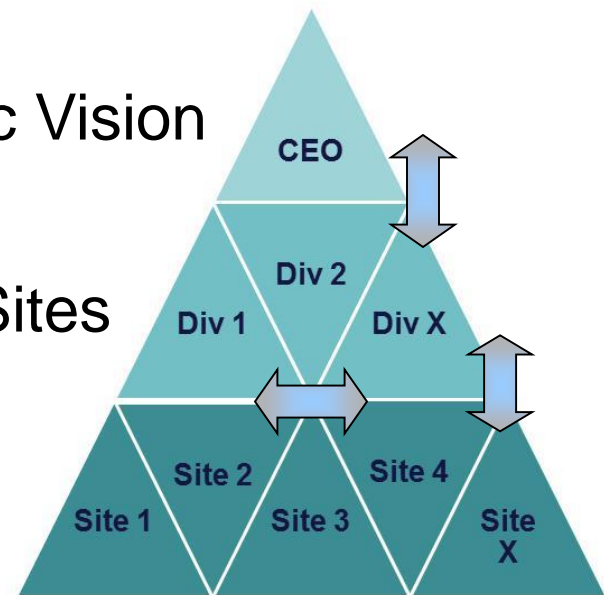
aka…HOSHIN KANRI

Sample X-Matrix Format

Bottom: Key strategies. Use a "SMART" format
Left: Initiatives on HOW to achieve the objectives
Top: TACTICAL actions to execute the initiatives
Right: Key METRICS used to monitor results
Far Right: WHO has line item responsibility

Sample Strategies
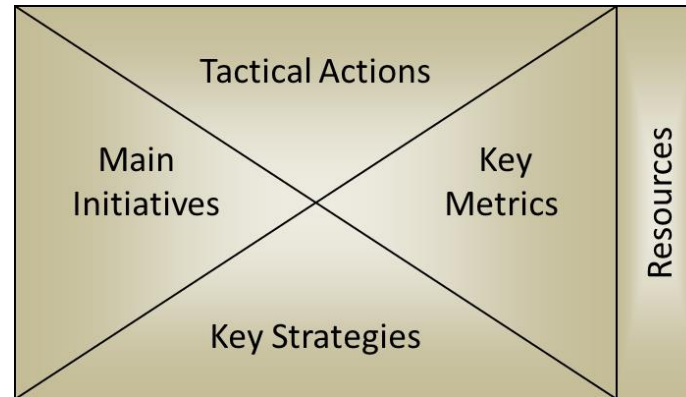
Customer	QCD: Quality (PPM), Cost (CI), Delivery (OTD)
Stakeholder	Margin, Revenue, Cash Conversion, Growth
Employee	Engagement, Turnover, Satisfaction, EHS
Supplier	QCD, Growth
Community	Social Responsibility, Compliance, EHS

X-Matrix Worksheet

Key Strategy Examples…

1. *Increase margin by 5% by 4Q*
2. Increase sales revenue by 10% by 4Q
3. Increase organic growth by 5% by 4Q (existing business)
4. Increase inorganic growth by 5% by 4Q (new products)
5. Increase New Produce Introduction (NPI) rate by 10% by 4Q
6. Grow market share from 15% to 20% by 4Q
7. Reduce warranty expenses by 25% by 4Q
8. Reduce internal rejects by 25% by 4Q
9. Reduce lead time from 7 days to 5 days by 4Q
10. Reduce supplier reject rate by 50% (20K DPPM to 10K)
11. Improve customer satisfaction score by 20% by 4Q
12. Reduce recordable safely incidents by 50% by 4Q
13. Increase employee morale by 10% by 4Q

Canadian Manufacturers & Exporters

X-Matrix Worksheet

Identify the top 1-3 tactical plans to achieve the initiative

Identify the top 1-3 ways of HOW you will attain the strategy

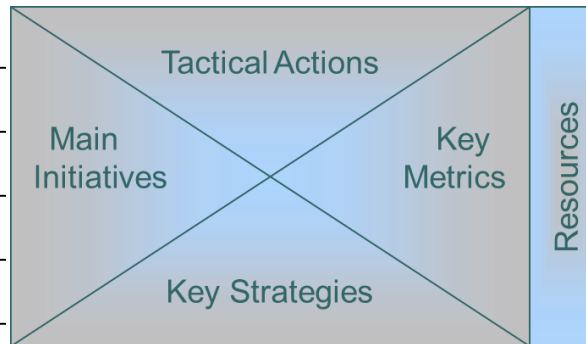## Main 1-3 Tactical Plans

1.1a _____

_____

1.1b _____

_____

1.1c _____

What are the key metrics?
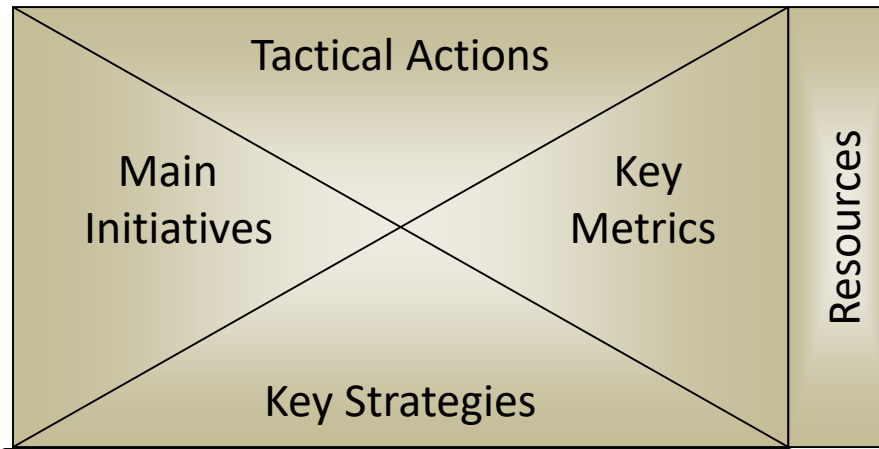
Main 1-3 Initiatives

1.1 _____

_____

1.2 _____

_____

1.3 _____

Tactical Actions

Main Initiatives

Key Metrics

Resources

Key Strategies

Key Input Metrics

1.1a _____

_____

1.1b _____

_____

1.1c _____

Key Strategy/Performance Goal (SMART)

1 _____

Write a sample Key Objective

Define "SMART" Strategies

Tactical Actions

Main Initiatives

Key Metrics

Resources

Key Strategies

Select your strategy

Key Strategy/Performance Goal (SMART)

1 _____

~6-8 Key Strategies

• Improve Margin by 5% points by 4Q. Increase of $250K

While developing the Key Strategies, multiple tools may be used such as SWOT, VOC, etc. Consider a "multi-customer" approach to support organizational robustness

Develop Initiatives

~1-3 Main Initiatives
per Strategy

- Reduce Warranty losses. $150K
- Reorganize Product Portfolios $100K
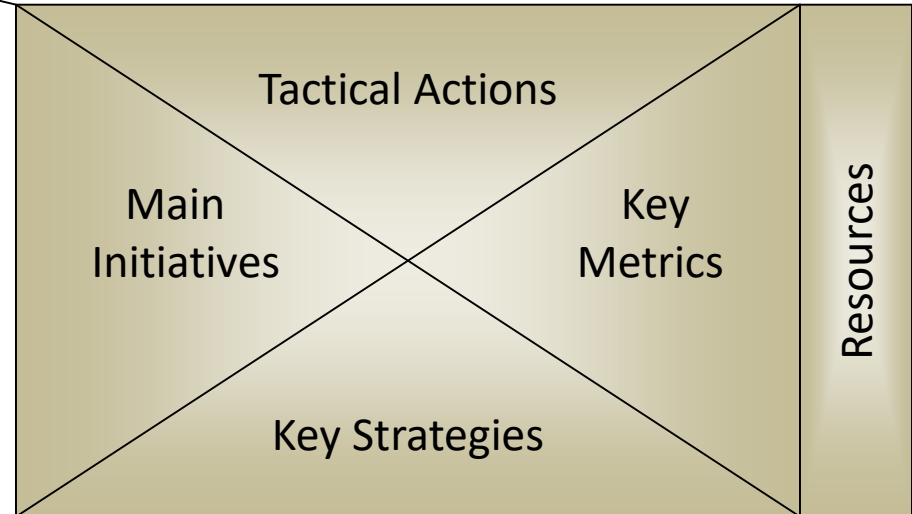
Identify 2-3 Initiatives
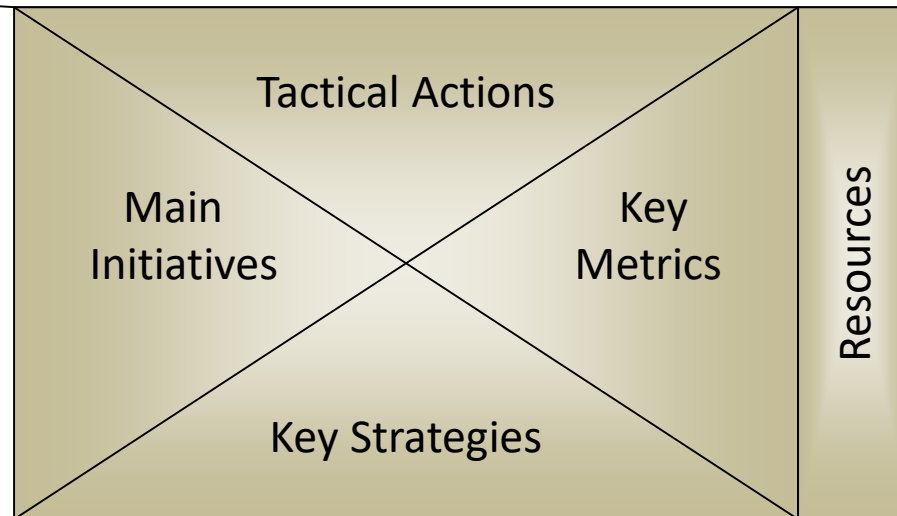
Main 1-3 Initiatives

1.1 _____
1.2 _____
1.3 _____

Tactical Actions

Main Initiatives

Key Metrics

Resources

Key Strategies

Improve Margin by 5% points by 4Q. Increase of $250K

Develop Tactics

~1-3 Tactical Plans per Initiative

- Implement Warranty Team. Conduct CA/PA.
- Conduct FMEA/CP Reviews on loss leaders
- Conduct VSM on Portfolio. Rationalize

Create 1-3 Tactics

Main 1-3 Tactical Plans

1.1a _____
1.1b _____
1.1c _____

- Reorganize Product Portfolios $100K
- Reduce Warranty losses. $150K

Tactical Actions

Main Initiatives

Key Metrics

Resources

Key Strategies

Improve Margin 5% by 4Q: Increase of $250K

Leading & Lagging KPIs

Lagging KPIs are usually results to upper management. Work to identify and manage leading KPIs that will affect these results

Leading Metrics	Lagging Metrics			
	OTD	PPM	COPQ	$Conversion
OEE: Operational Equipment Effectiveness	+	+	+	+
RTY: Rolled Throughput Yield	+	+	+	+
%Cpk: Processes Capable of Meeting >=1.33	+	+	+	+
MTBF: Mean Time Between Failure	+		+	+
C/A %Repeat: Repeating Complaints		+	+	
Training Depth: Personnel Skill Levels		+	+	
Linearity: Production Schedule Attainment	+		+	+
C/A TTC: Time to Close Corrective Actions		+	+	+

Canadian Manufacturers & Exporters

KPI Correlation Worksheet

Lagging metrics are usually upper management inputs.
Identify and manage **leading** metrics to **impact** those results

Example Leading Metrics	Lagging Metrics		

1. Identify your top 3-4 lagging indicators
2. Draft in relevant leading indicators based on your business/industry
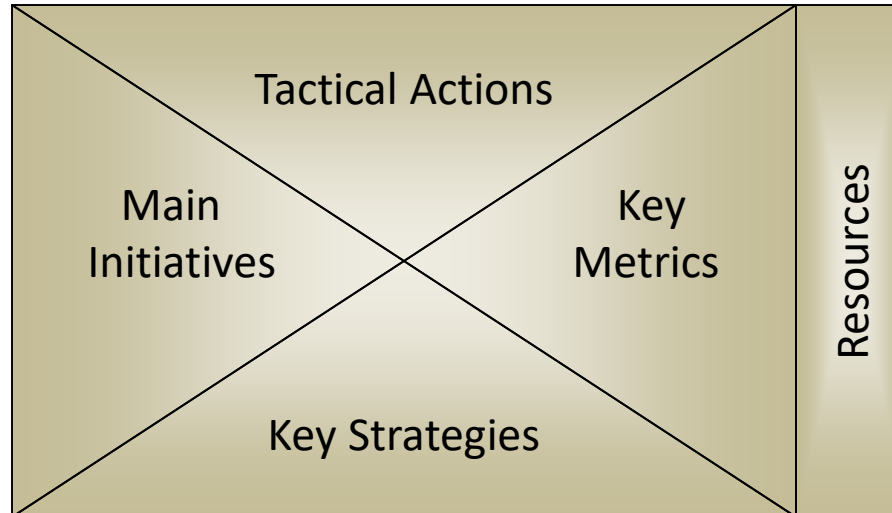3. Assess for correlations

An X-Matrix…How It Looks

X-Matrix: Organization, Year

	1.2 Reorganize Product Portfolios. $100K	1.1 Reduce Warranty Losses. $150K						Margin	Warranty	Portfolio Margin	Joe	Tom	Sue
	●		**1.2a Conduct Portfolion Analysis. Rationalize**					●		●			●
		●	**1.1b Conduct FMEA/CP Reviews on loss leaders**					●	●	●		●	
		●	**1.1a Implement Warranty Team. Conduct CA/PA**					●	●	●	●		
			Key Tactics "HOW 2"										
			Main Initiatives "HOW 1"		Key Metrics "BSC"								
			Key Objectives "WHAT"										
	●	●	**1 Improve Margin by 5% Points**					●	●	●	Resources		
	←		2 xxx								● Primary		
											○ Support		

X-Matrix Worksheet…Your Turn

Tactics
To Achieve Initiatives

Key
Initiatives

Key
Metrics

Key
Strategies/
Objectives

1. Improve Margin by 5%

Resources

● Primary Owner

◯ Support

Example: ASQ QMD Non-Profit

C:\Documents and Settings\marhevjd\My Documents\ASQ\QMD Strat Plan & BSC Data\[QMD Strat Plan 08 Q2 QMP 08 09 v1.xls]Succession Plan

Strategic planning X-matrix showing QMD Vision, Mission, strategic objectives, tactical improvement plans, key success indicators, and resources.

QMD Vision
Engage people, organizations, and communities in continual improvement

QMD Mission
Convey lifelong quality related knowledge through information, methods and tools that add value to Organizations, Society and Individuals

ASQ QMD: Results

- Largest quality professional organization in the world at > 21,000 global members

- Largest division in ASQ of >70,000 global members

- Most touch points (member-valued interactions) of any division at >30/year

A Non-Profit Organization

Canadian
Manufacturers &
Exporters

Operations: For Profit Example

Slide title: 2018 Canadian LEAN Conference

Level II Matrix - YEAR 20XX

Initiatives (right-side list):
- 4.3 Engineering Alignment
- 4.2 QMS Execution: TS Systems
- 4.1 QMS Execution: APQP
- 3.1 New MRP Implementation
- 2.2 Lean/Continual Improvement Integration
- 2.1 Customer Satisfaction
- 1.2 Process Control (SPC/KPI)
- 1.1 Scrap/Defect Reduction

Tactics:
- 4.3.b. Conduct annual reviews and training updates on ISO/TS Core Tools by 2Q
- 4.3.a. Increase QA personnel understanding & interpretation of product specs by 3Q
- 4.2.a.
- 4.1.b.
- 4.1.a. Upgrade corporated-wide APQP processes to achieve 95% compliance on TS System score by 2Q
- 3.1.a. Leverage sub-teams to implement MRP conversion
- 2.2.c. Participate in monthly Council reviews
- 2.2.a. Implement Kanban flow plans to reduce DIOH by 20% by 4Q
- 2.1.b. Create action plan to close customer feedback gaps by 3Q
- 2.1.a. Review and upgrade existing Customer Feedback Process by 1Q
- 1.2.c. Plan, develop, manage and implement automated SPC at appropriate processes
- 1.2.b. Enable accurate SPC formats to meet 80% audit scores
- 1.2.a. Monthly Management to increase Capable Processes to >85% KPIs
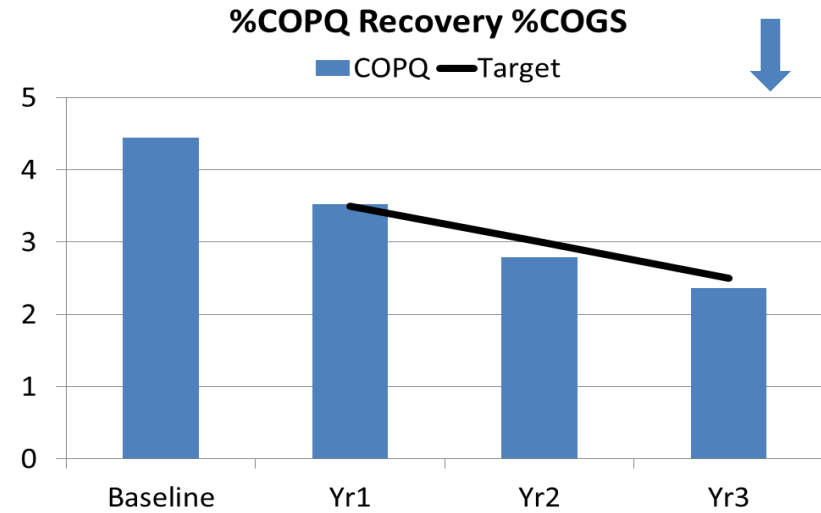- 1.1.a. Reduce scrap/rework losses by 50% 4Q

Strategies:
1. Exceed fina...
2. Increase pro...
3. Reduce bus...
4. Improve customer satisfaction via quality/warranty and OTD performance
5. Grow team skills and talent levels
6. Exceed safety/environmental standards
7. Enable competitive costing via lean processes

Metrics (KPIs): COPQ %COGS, OEE, OTD, PPM, Rolled Throughput Yield (RTY), Lean Savings, Linearity, DIOH, 8D TTC, %KPIs that meet capability, MTBF, TS/ISO Status, QMS/Lean Score, Skills Assessment Level

Diagram center:
- Top Level Initiatives (To Achieve Priorities)
- 2nd Level Tactics (To achieve the initiatives)
- KPIs to Improve
- YEAR 20xx-xx Strategic Priorities Business Strategy

Resources:
- ● Responsible/Accountable ○ Consulting/Support

Three (3) QMS Strategies
1. Improve upon what we do (reduce PPM/COPE, grow KPIV)
2. Deliver new products/processes well (APQP/OTD/TS/DIOH/RTY)
3. Grow our skills to enable 1 & 2 (Blooms, QMS, TS)

Labels: Tactics, Initiatives, Metrics, Strategies

It Must Be Right for It to Flow

%Cpk Recovery

■ %Cpk ━ BMark ━ Target
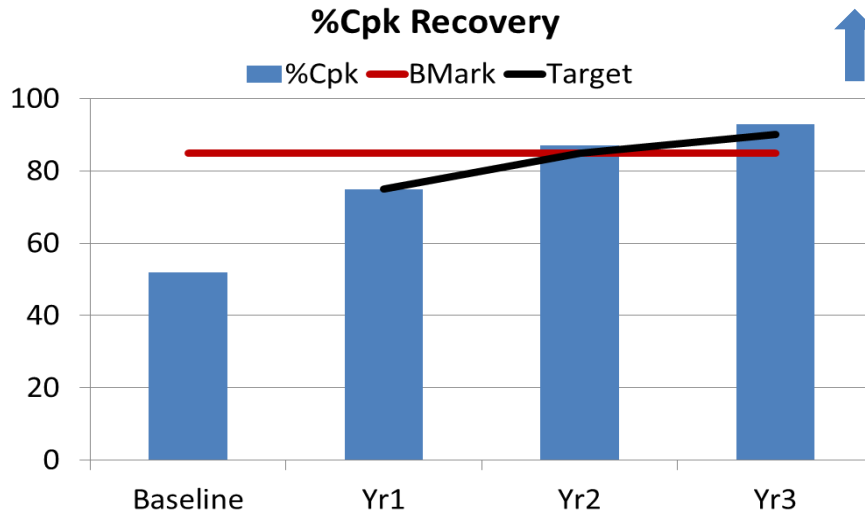
Worldclass Cpk Performance

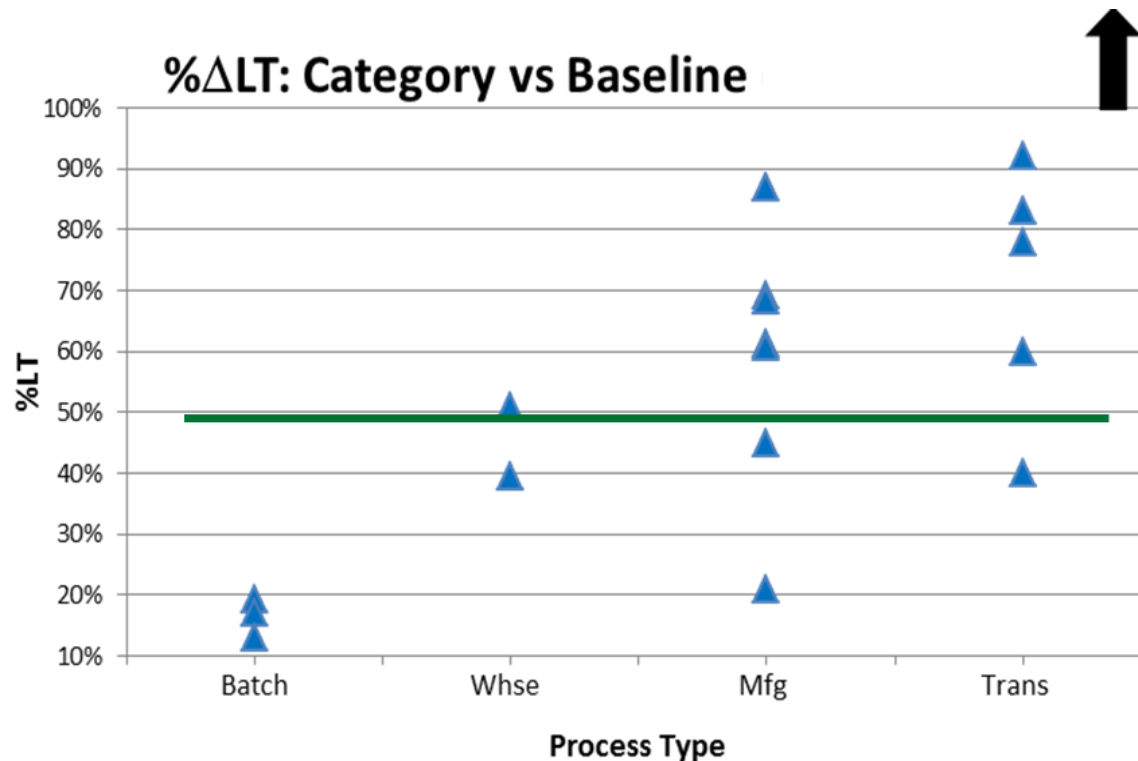**%COPQ Recovery %COGS**

■ COPQ ━ Target

Continued YOY COPQ Reduction

Leverage a three-point QLMS strategy:

1. Correct issues that are causing losses. %Cpk/COPQ focus
2. Design/Develop new products (NPI) and processes so that new issues are not "released" causing business losses. DFSS
3. Effectively train personnel in two skill sets: A. Corrective Action and B. Preventive, Risk-Based Thinking (RBT)

WINNIPEG | JUNE 4–7, 2018
Confidential. Do Not Distribute.
30

Canadian Manufacturers & Exporters

Flow Means "Go" 50-50-20

Observation: The more complex the process, the more LT was reduced

- An average reduction of **50% LT** had much less working capital
- Enabling the average **Productivity** to increase by **50%**
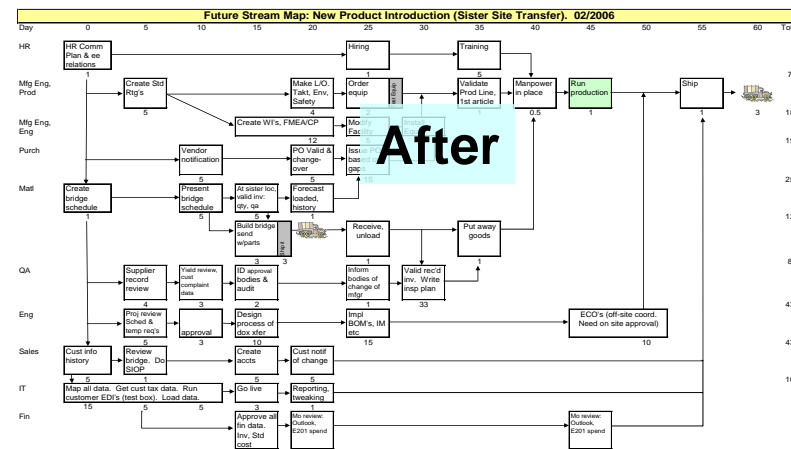- And the average **CPU** to be lowered by more than **20%**

Sample VSM: NPI

Before

After

Future Stream Map: New Product Introduction (Sister Site Transfer). 02/2006
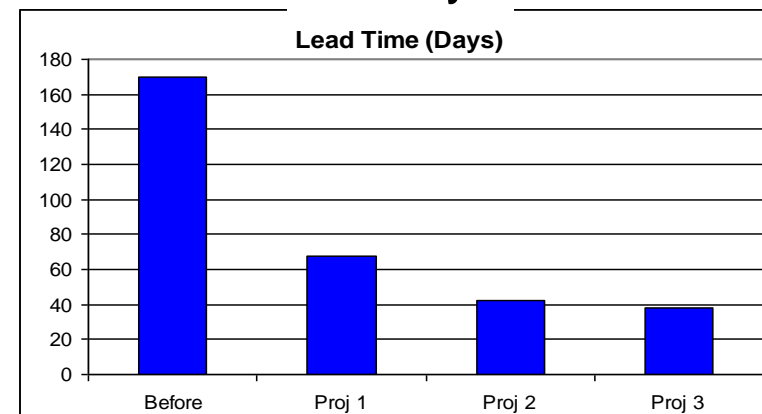
170 Days

40 Days

Initiative: Reduce New Product Introduction Lead Time

Action: Conduct value stream map review. Implement fixes

Results: 70% Lead time reduction. Team able to increase NPI output

Lead Time (Days)

DMAIC Worksheet

Forms of Waste	Related Wastes	Actions to Improve
Correction		
Overprocessing		
Mess		
Motion		
Inventory		
Transportation		
Not Using Ideas		
Overproduction		
Waiting		

Measure

It's not what you pay a person, but what he costs you that counts

Will Rogers

Canadian
Manufacturers &
Exporters

Sample KPI Format

History (2-3 yrs)

Arrow for desired direction

Warranty %COGS

Performance Goal

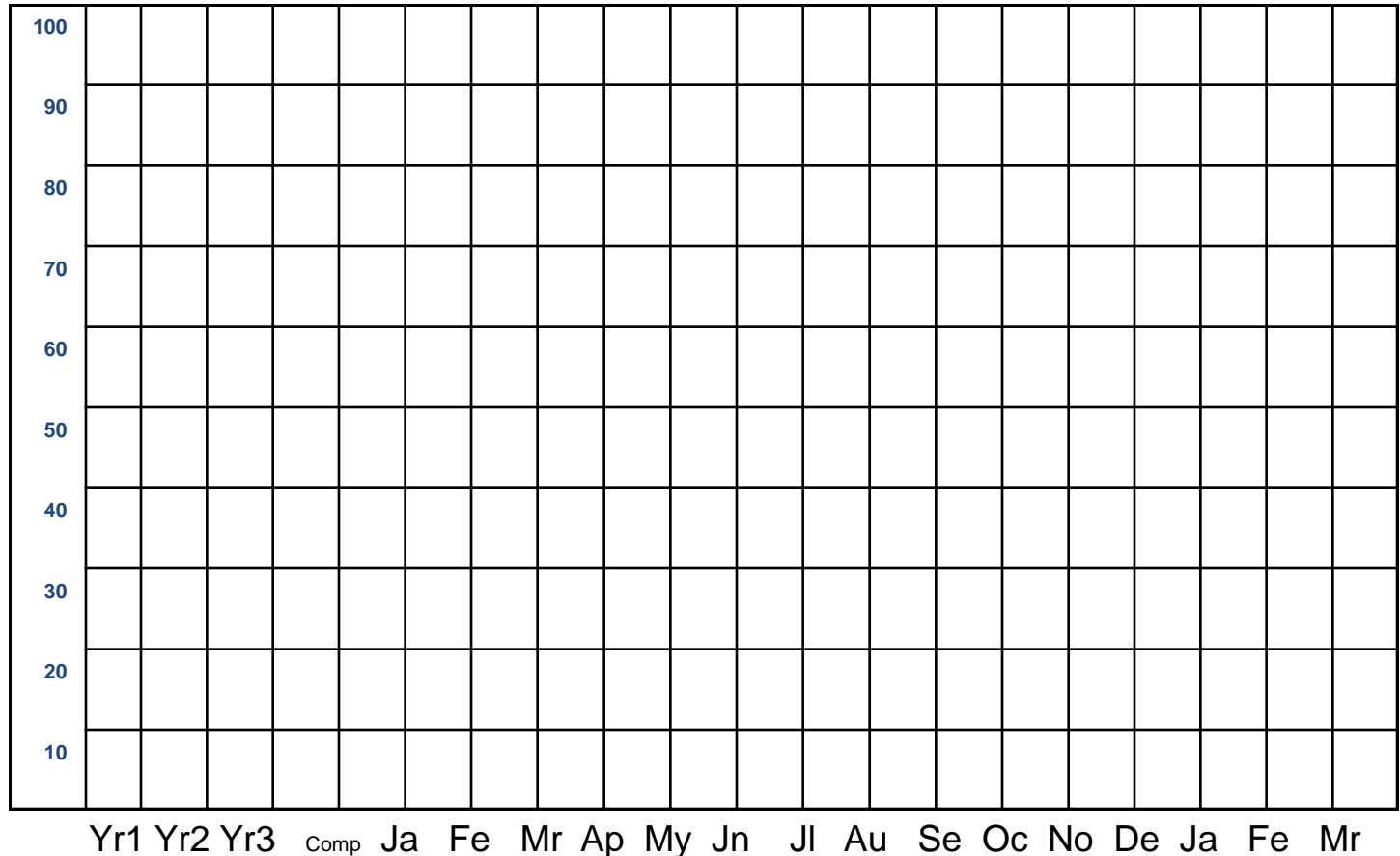Point of Comparison

Current Performance
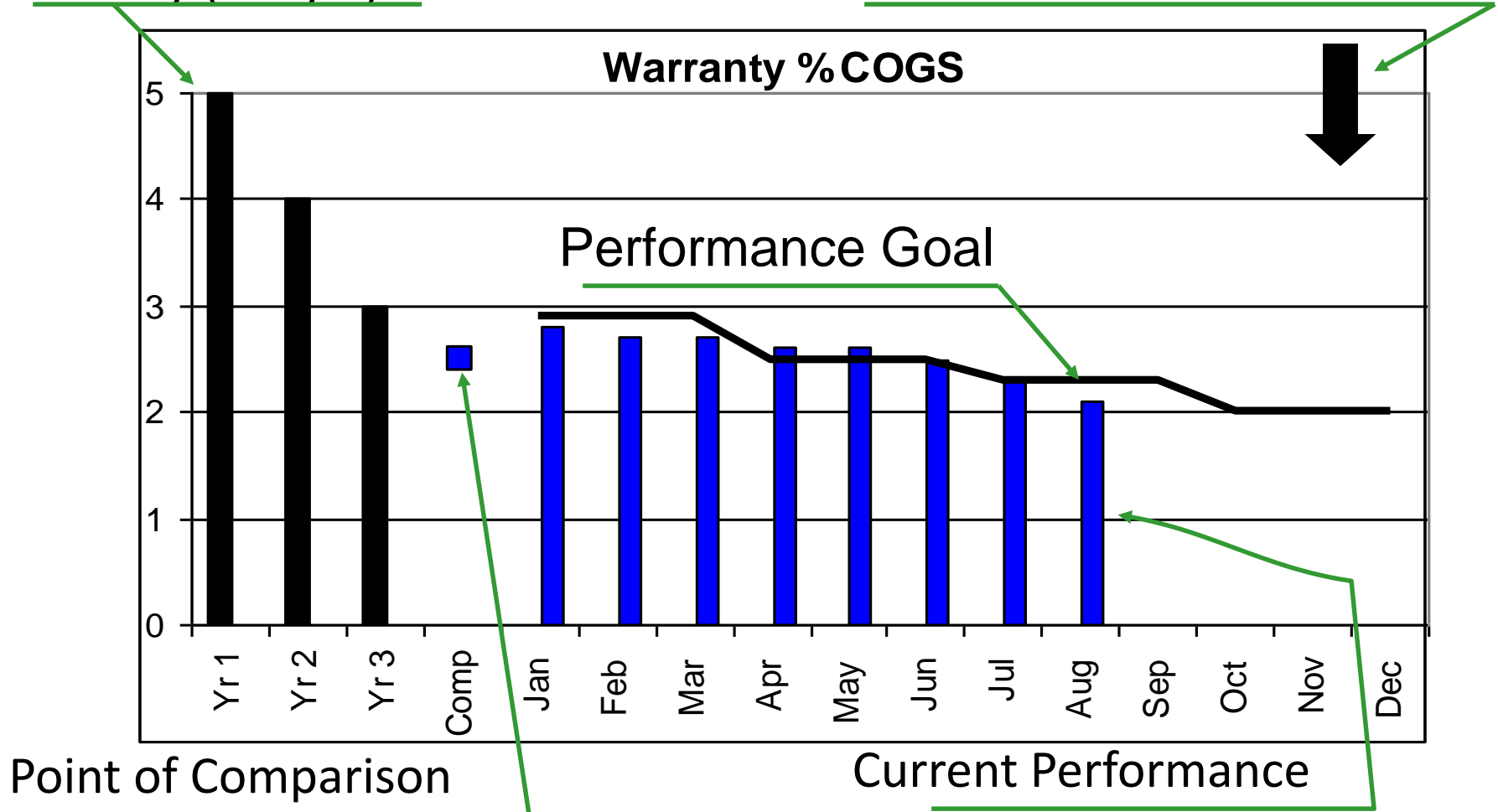
KPI Worksheet

Using the following data, create a sample Business Score Card (BSC) graph. Be sure to incorporate: History data, a comparison, a directional arrow, the goal/target line and current performance

On-Time Delivery: Goal 95%

| Yr 1 – 52% |
| Yr 2 – 48% |
| Yr 3 – 46% |
| Comp – 94% |
| 01/xx – 34% |
| 02/xx – 35% |
| 03/xx – 69% |
| 04/xx – 41% |
| 05/xx – 55% |
| 06/xx – 84% |
| 07/xx – 52% |
| 08/xx – 58% |
| 09/xx – 83% |
| 10/xx – 62% |
| 11/xx – 68% |
| 12/xx – 88% |
| 01/xx – 78% |
| 02/xx – 83% |

Graph axis values: 100, 90, 80, 70, 60, 50, 40, 30, 20, 10

X-axis labels: Yr1 Yr2 Yr3 Comp Ja Fe Mr Ap My Jn Jl Au Se Oc No De Ja Fe Mr

Analyze

Why not go out on a limb, that's where the fruit is.

Will Rogers

Sample Product Portfolio

Qty of Items at Targeted Margin — Before

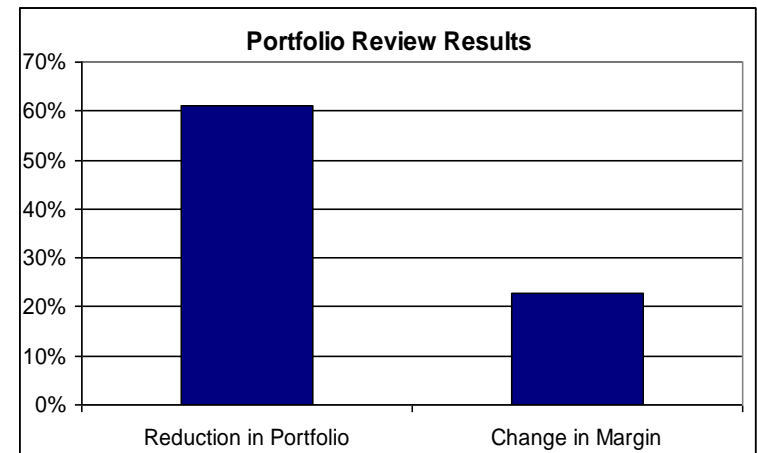**Qty of Items at Targeted Margin** — After
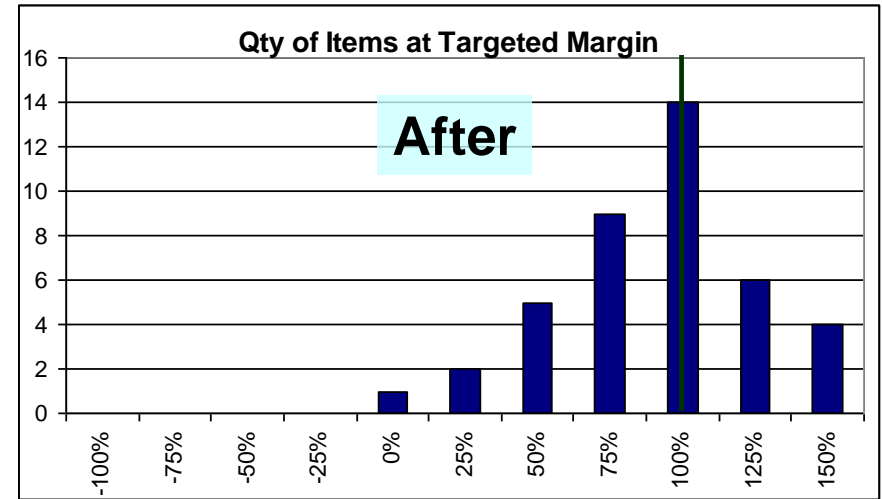
Ex: If targeted margin is 5%, then 8+ Items were meeting the 5% objective before and 14+ were meeting the objective after

Initiative: Improve margin by 5%

Action: Conduct VSM review on portfolio mix. Rationalize products. Continue to prune

Results: 22% Improvement in margin base

Portfolio Review Results

Reduction in Portfolio | Change in Margin

DMAIC Worksheet

Forms of Waste	Related Wastes	Actions to Improve
Correction		
Overprocessing		
Mess		
Motion		
Inventory		
Transportation		
Not Using Ideas		
Overproduction		
Waiting		

Improve

Even if you're on the right track, you'll still get run over if you just sit there.

Will Rogers

Canadian
Manufacturers &
Exporters

Leveraging the X-Matrix

Hoshin Kanri is not the same as Management by Objective (MBO)
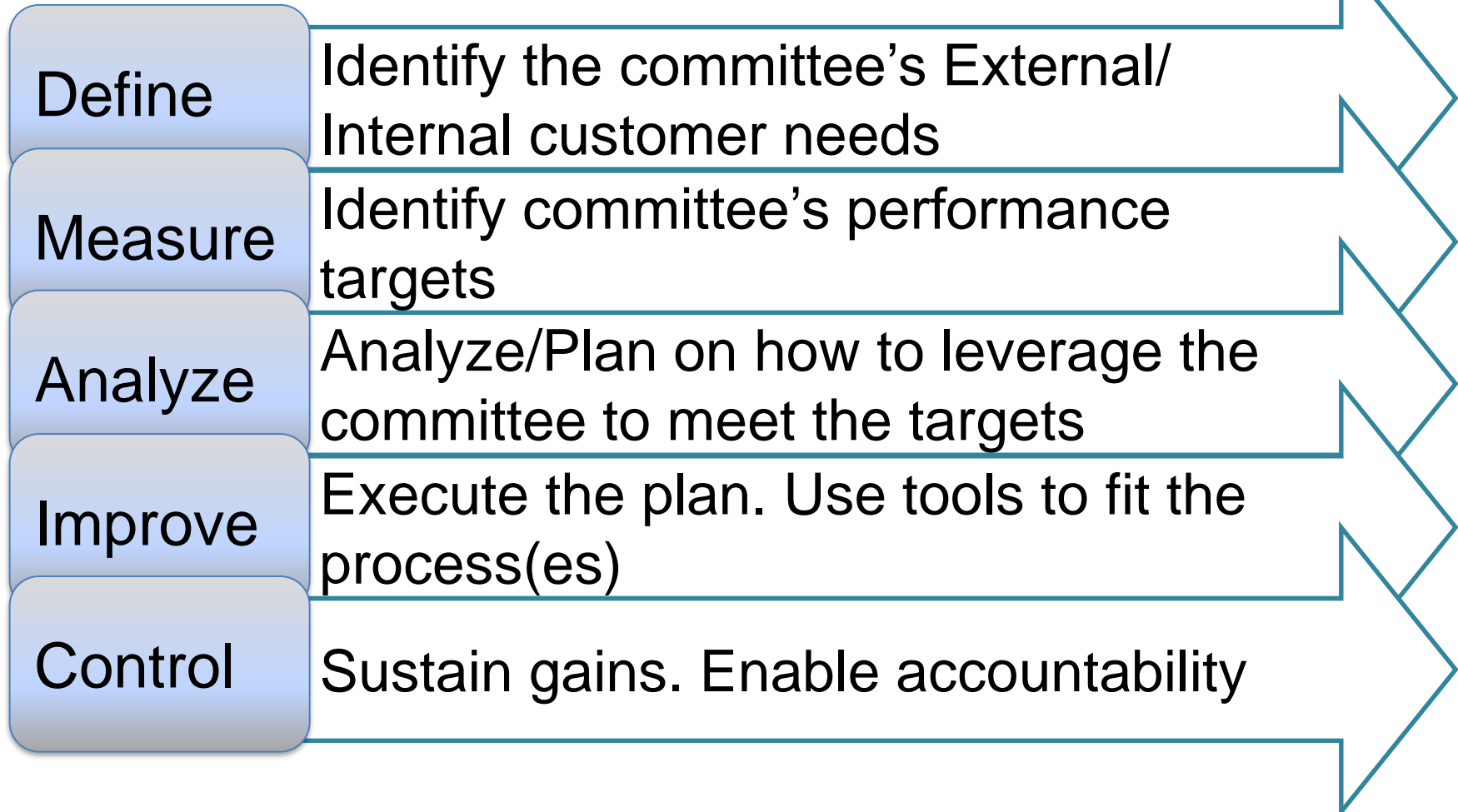Source: Toyota Culture – Jeffrey Liker and Michael Hoseus (2008)

Management by Objective (MBO)	X-Matrix (Hoshin Kanri)
Results-oriented evaluation of effort	Concerned with both results and process of getting those results
Top-down communication	Top-down direction setting and bottom-up flow of information and means
Directive	Participative
Linear (no feedback, no second chance, just start over from scratch each time)	Circular (adds feedback loops (aka Catchball) and cycles of improvement)

Control

People's minds are changed through observation and not through argument

Will Rogers

Canadian
Manufacturers &
Exporters

DMAIC for a Steering Committee

Define	Identify the committee's External/Internal customer needs
Measure	Identify committee's performance targets
Analyze	Analyze/Plan on how to leverage the committee to meet the targets
Improve	Execute the plan. Use tools to fit the process(es)
Control	Sustain gains. Enable accountability

Canadian Manufacturers & Exporters
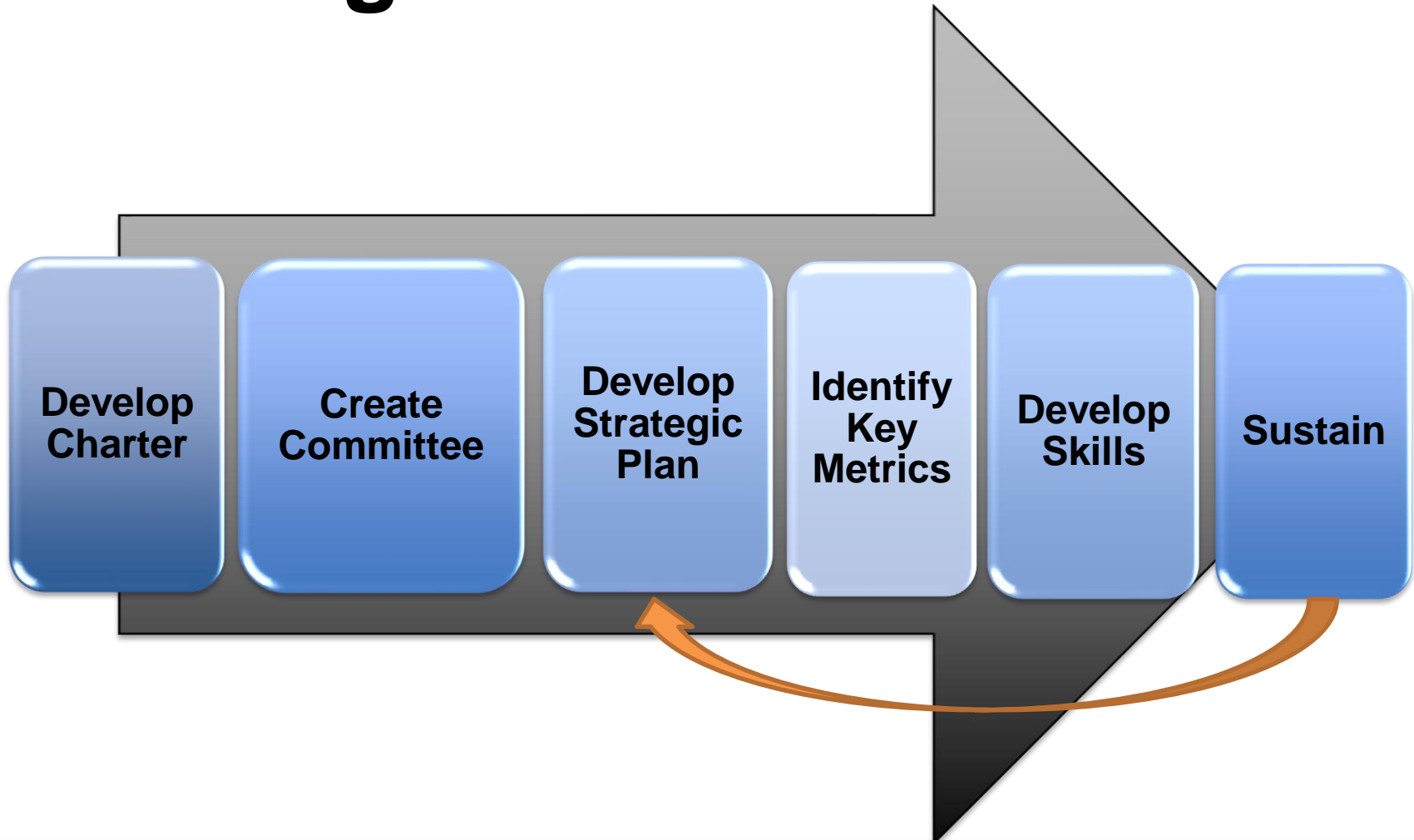
Committee's Charter

Scope: Enterprise-wide Quality & Lean Systems
Objective: To effect systematic a QLMS to meet business needs & exceed competitor performance

Key Actions: DMAIC

Define: Conduct business-wide baseline analysis. Identify key areas of focus by using strategic planning. Insure horizontal and vertical goal alignment

Canadian
Manufacturers &
Exporters

Key Actions: D**MAIC**

Measure: Identify key metrics & leading indicators. Improve on metric calibration and effectiveness. Use a transparent approach to meet the objectives

Analyze: Conduct effective system reviews

Improve: Engage employees in the executive of effecting improvement. Share before/after results. Review and improve upon the QLMS skills of the council. Benchmark others

Control: Sustain gains. Share successes/lessons

Canadian
Manufacturers &
Exporters

Assessment, Mission/Vision

Assessment: Identify what type(s) of assessments of the current situation are needed: QLMS Status Tool, Personnel Skills, Effectiveness of Metrics, etc.

Mission: To effectively support the Company in attaining its strategic objectives by using QLMS systems to meet and exceed internal and external customer expectations of delivery, quality and cost **Vision**: To be viewed as Company Champions of the QLMS Implementation

Canadian Manufacturers & Exporters

Consistency/Challenges

Consistency of Approach: Grow education base. Leverage QLC for execution of QLMS. Share lessons; internally and externally. Transition from an education to application platform

Challenges: Identify current issues that need to be overcome

Economies of Scale: Align team monthly, conduct Face to Face planning sessions, leverage an Intranet and Visual Operating System (VOS), etc

Canadian Manufacturers & Exporters

Committee Members

Factors to consider:

- Culture, Locations, Globalism
- Breadth/depth of QLMS execution (pilot, enterprise)
- Internal implementation, consultant support, etc.
- QLMS skill levels

Canadian Manufacturers & Exporters
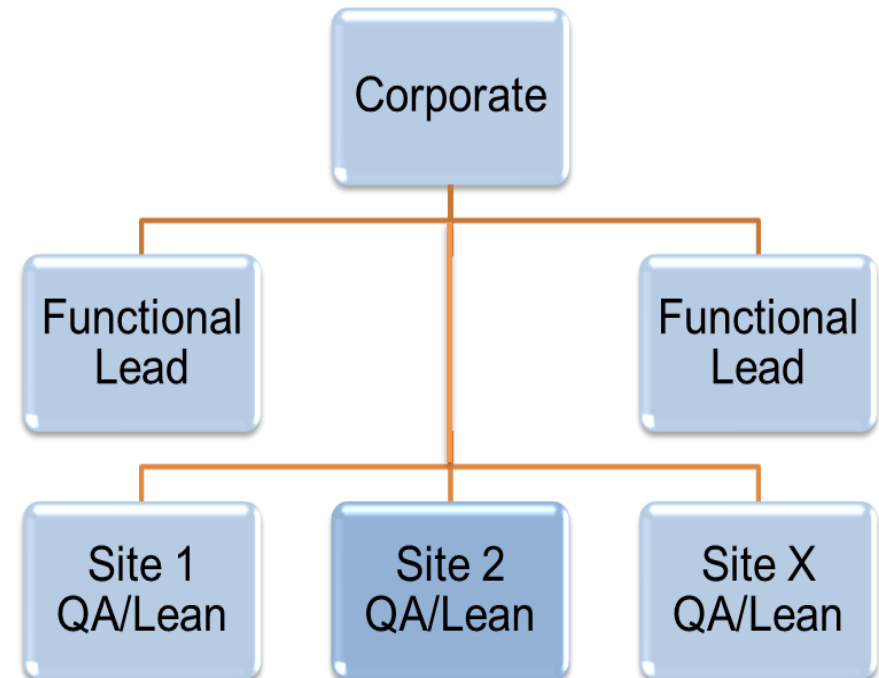
Create an Aligned Strategic Plan

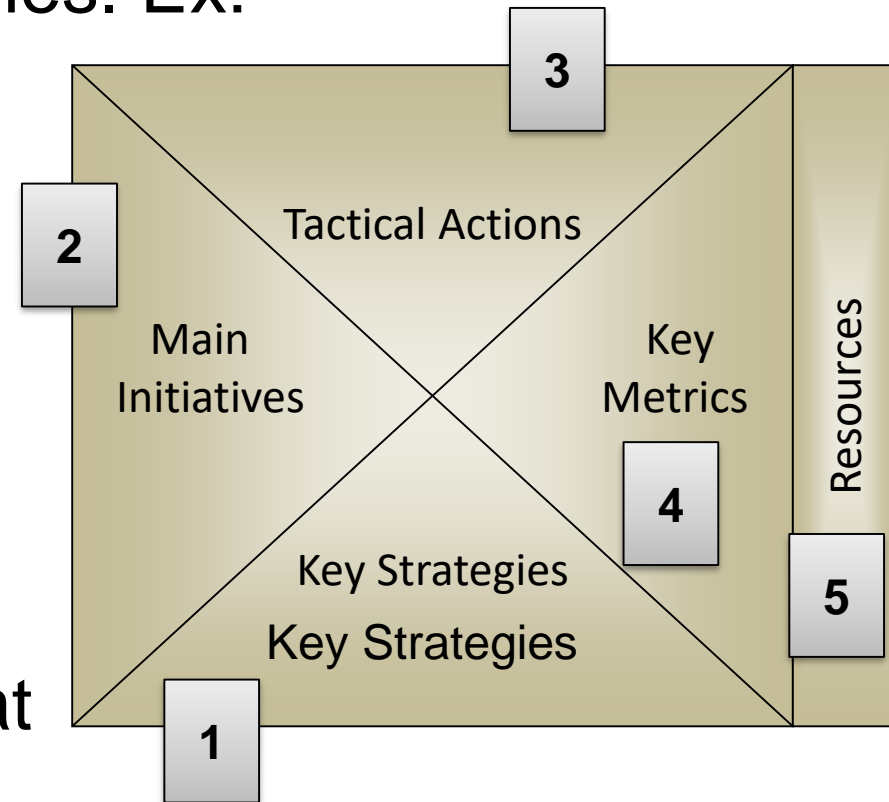1. Review business strategies. Ex:
   - Increase margin
   - Grow sales revenue
   - Develop new products
2. Develop aligning QLMS initiatives
3. Determine tactics
4. Identify key metrics
5. Identify who is to do what

Committee QLMS Skills

Committee skills are key to effective execution; Accelerate learning plan

- Determine **key** QLMS skills for **your** business. Assess team
- Implement a training plan

With this method, you can…

- Identify strengths/weaknesses
- Set individual planning goals
- Tie learning to strategy
- *Lead by example*

Ann	John	Larry	Bill	Sue	Mary	Joe	Tom	Personnel Name
								Define: Prob Defn, Timeline
								Measure: Overview
								M: Cp/Cpk/Pp/Ppk
								M: Distrib (Norm/Poiss)
								M: MSA Var/Attrib
								M: Scatter/XY, Correl
								A: Analyze, Pareto, PFD
								A: Fishbone/Ishekawa C&E
								A: DCP (FMEA/CP)
								Improve: Verify, StdW, Xfer
								Improve: CAPA, 8D
								Control: Train, Dox/SOP
								3rd Party: ISO/TS
								Stagegate, PPAP/APQP
								NPI/ECN: Product/Process
								Internal Auditing/CQA
								Stat: DOE, Tools
								SPC x/p/c/u

Canadian Manufacturers & Exporters

Committee QLMS Skills

Holding the Committee accountable for learning and applying the skills will increase business buy-in
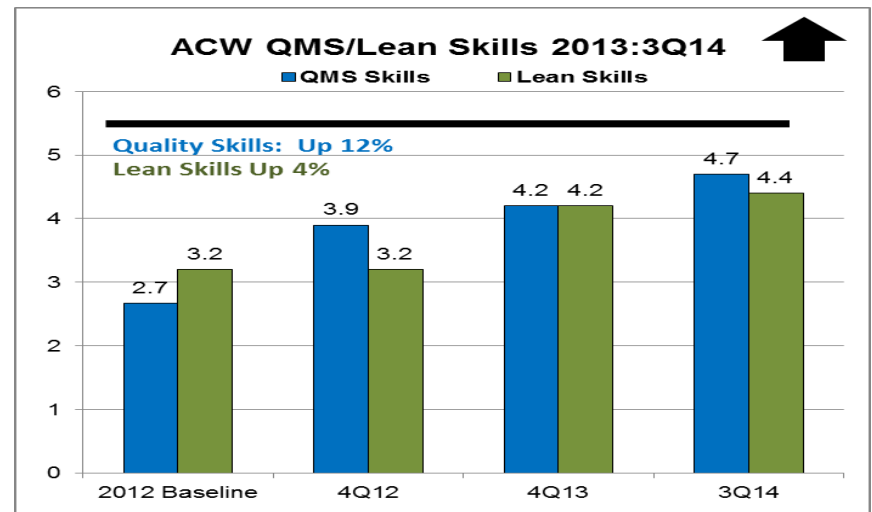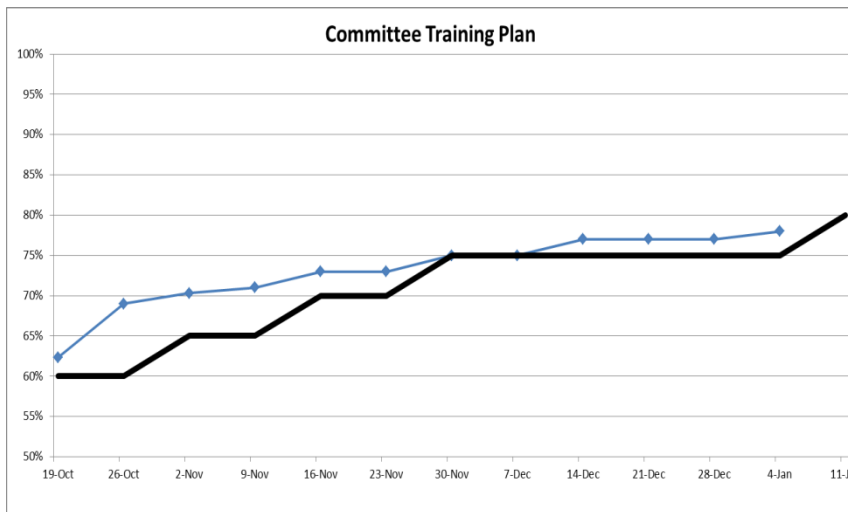
While the committee was learning on live processes, they both improved the systems and their skills

Sustain Committee

Analyze, Improve, Control

- Meet yearly to set strategy
- Check progress to tactics quarterly
- Meet monthly to review performance
- Adjust to business needs
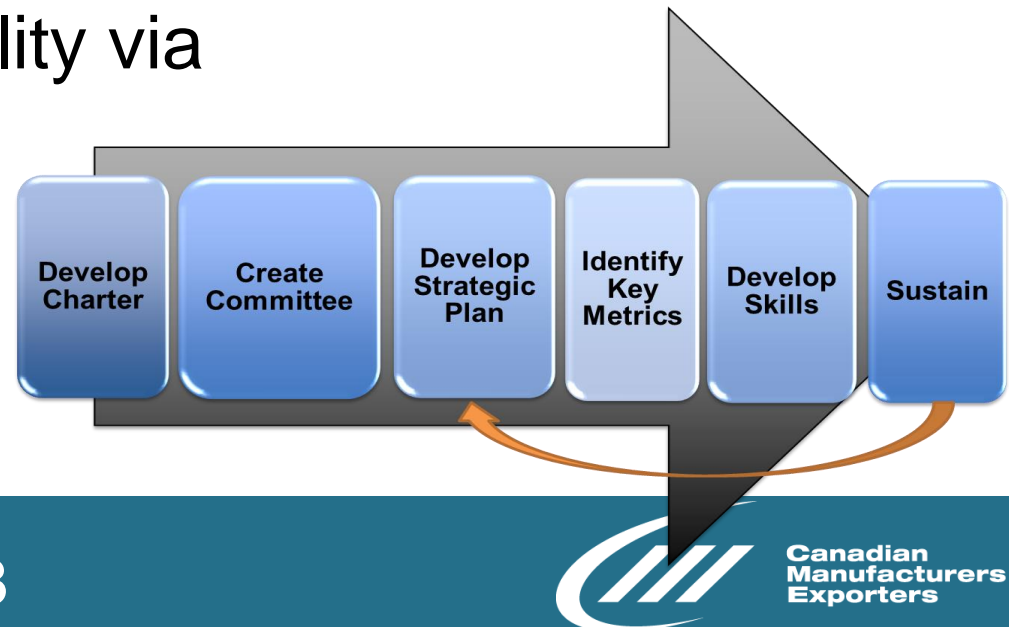
Rules of Engagement

- Agenda/Minutes
- Lessons Learned

Meeting Minutes/Agenda: Monthly Quality Council, every 3rd Thursday of the Month		
Date: 19-Mar-2015	**Telecon:** US 888.337.0215	p = 68.22.753
Time: 10:00 am – 11:00 am CST	Intl 720.514.4158	

PURPOSE
- Review status of Lean standardization efforts across Accuride Corporation
- Review performance results to Lean KPIs
- Share Lessons Learned – Minimum, 1 location

EFFECTIVE MEETING CHARACTERISTICS

x	Everyone notified	x	Meeting Began On Time
x	All Sites prompt, organized, prepared and participated	x	Action Items Assigned
x	Agenda Developed	x	Minutes Recorded
x	Review past minutes and Action Items	x	Meeting Ended on-Time

Comments: Review QMS Status/Planning

Attend	DISTRIBUTION AQC Member/Participant (BU/Site/Name)	DISTRIBUTION AQC Member/Participant (BU/Site/Name)	
Jd	Accuride QA & Lean: Jd Marhevko	A	jb/ck
as	Accuride I	A	dk
n/a	Gunite RKI		
gn	Brillion: G		
jj	Wheels ER	H	lw
ot	Wheels HE	H	
kr	Wheels HE	H	
ke	Wheels CN		
rt	Wheels Ad	A	gm
jm/cc	Wheels LO	A	pw
km	ADC: Bill N	T	db

AGENDA — *Attachments to be sent prior to the Council Call*

Time	Topic/Discussion Item	Who	Time
10:00	Attendance. Roll-call.		0:03
10:03	**ALC. Calendar:** Review calendar		0:01
10:04	**Status:** X-Matrix Status Update…Round Robin: LEACH, AOT/ADC, Rkfd, BIW		0:30
10:34	**ALC. E-VSMs:** Ea team to report on key items; Will review in June Lean Review		0:00
10:34	**Status:** Transactional VSMs…round robin; BIW, Rkfd, L, E, A, C, H, AOT/ADC		0:00
10:34	**AME Plan:** Erie/Rockford. Status		0:03
10:37	**MBB/IE:** Current 4SQ Status		0:05
10:42	**KPIs.** Transition to Plex; AS/DB		0:05
10:47	**Next Steps.** Accu-Launch - general status		0:05
10:52	**Lessons Learned. ADC Whse**		0:05
10:57	**Accuride News:** GB Sessions IP at EVV (32 attendees)		0:01
10:58	**Next meeting:** Thursday, April 16th		0:01

Canadian Manufacturers & Exporters

Sustain: Hold the Gains

Steering Committees generally experience heavy turnover. To retain effectiveness consider…

- Quarterly alignment to strategic plan
- Partner new members with seasoned personnel
- Standardized & accessible learning material
- Hold KPI accountability via personnel reviews

Develop Charter → Create Committee → Develop Strategic Plan → Identify Key Metrics → Develop Skills → Sustain

Canadian Manufacturers & Exporters

Charter Worksheet; Pg 1 of 2

Area	Notes
Members	
Scope	
Objectives	
Define	
Measure	
Analyze	
Improve	

Charter Worksheet; Pg 2 of 2

Area	Notes
Control	
Mission	
Vision	
Challenges	
Approach	
Scale	

Canadian Manufacturers & Exporters

X-Matrix Worksheet…Your Turn

Tactics
To Achieve Initiatives

Key
Initiatives

Key
Metrics

Key
Strategies/
Objectives

Resources

● Primary Owner

○ Support

We Have Applied Hoshin Kanri

Define — We used an X-Matrix to define our customer needs (internal/external)

Measure — We used an Obeyah flow to determine the KPIs for performance evaluation

Analyze — We used VSM to investigate causes for gaps and created a plan of attack

Improve — We executed improvements and used tools to fit the problem (VSM, TPM, SUR, EP…)

Control — We used a Steering Committee process to execute the flow

What's Next? Get Engaged

- Learn your organization's strategies
- Match those strategies to your objectives
- If they don't match, adjust accordingly
- Share how YOU and your TEAM are making a contributory difference to enabling the strategies to occur
- Demonstrate YOUR relevance!

Thank You!
Hoshin Kanri
Arvind Srivastava
Accuride Corporation
asrivast@AccurideCorp.com

Company Quality Council 20XX Charter

Company Quality/Lean Council (QLC)				
Corporate	**QA Name**	**Lean Name**	**SCM Name**	**Eng Name**
Site QA & Lean Leaders. Other key members	Site 1 QAM Name Site 2 QAM Name Site 3 QAM Name Site 4 QAM Name Site 5 QAM Name	Site 1 Lean Name Site 2 Lean Name Site 3 Lean Name Site 4 Lean Name Site 5 Lean Name	Site 1 Eng Name Site 2 Eng Name Site 3 Eng Name Site 4 Eng Name Site 5 Eng Name	Site 1 IT Name Site 2 IT Name Site 3 IT Name Site 4 IT Name Site 5 IT Name

Scope	Company's Quality and Lean Management Systems, Enterprise-wide
Objectives / Deliverables	To support and effect a systematic methodology of deploying the Quality and Lean Management System to meet the customer expectations and exceed competitor performance and corporate requirements
Key Actions	**Define:** Conduct Lean and Quality Management System baseline analysis across the business. Utilize X-Matrix strategic planning methods to identify key areas in which to focus improvements and/or to close gaps. Insure horizontal and vertical alignment on the goals and objectives **Measure:** Identify Quality and Lean based KPIs focusing on leading indicators. Refine and improve the calibration and effectiveness of the KPIs and align them to the business strategies. Continue to use a dashboard approach to meet delivery, quality, cost and safety **Analyze:** Conduct focused and effective system reviews using QMS and Lean methodologies. **Improve:** Engage our employees in the application and execution of effecting improvements. Demonstrate before and after results. Benchmark the systems of others to further our knowledge base. **Control:** Sustain gains. Share successes and Lessons Learned (LL)

QLC Mission: To effectively support the Company in attaining its strategic goals and objectives by using Quality and Lean Management Systems and methodologies to help the business meet and exceed both internal and external customer expectations of delivery, quality, cost and safety

QLC Vision: To be viewed by Accuride employees as Champions of Quality System Implementation and Excellence.

Assessment of Quality & Lean Functions: The team will execute through a Council. Baseline assessments have been conducted across all core locations. An enterprise-wide improvement plan will need to be developed for execution. Leading KPIs have been developed for review and baselines are being established. A focused growth in the bench strength of QLC members is needed based on key quality science skills levels. Standardized systems are being reviewed for gaps as well as the opportunity to build upon existing foundations.

Challenges: Team members are at different levels of quality and lean science skill sets, applicational backgrounds, and ability to execute quality and lean systems. IT/Data systems are needed for effective data collection and rapid analysis. Internal 8D/CAPA systems need to be developed at most locations. Leading indicator KPIs need to be developed. Overall, need to focus on and manage scrap due to lack of process control and system losses due to lack of material flow control. There is a need to manage cultural change.

Consistency of Approach: Grow baseline education and establish goals. Utilize QLC to leverage execution of core processes. Share lessons learned; internally and externally. Create a plan to transfer from a platform of education to one of application with measured results.

Leveraging Economies of Scale: Utilize monthly, web-based telecons for team alignment. Conduct bi-annual Face to Face (F2F) strategic planning sessions. Leverage F2F sessions to grow skills and align resources. Leverage the Intranet for shared processes and documents. Publish/Share benchmarking activities across the business. Standardize quality and lean Visual Operating System documents/processes as feasible.

Resources

There are hundreds of excellent books/tools/sites, etc. Here are few that I have used as recent references:

- Accuride Corporation. Lean Management 50-50-20. Marhevko, Srivastava, Blair
- ASQ Quality Management Division. ASQ-QM.org.
- ASQ.org
- AME.org
- Lean Enterprise Institute (LEI) at Lean.org
- Superfactory.com
- Hoshin Kanri for the Lean Enterprise. Developing Competitive Capabilities and Managing Profit. Thomas L. Jackson
- The Lean Pocket Guide: National Association of Job Shops and Small Manufacturers (NAJS)
- From Good to Great. Jim Collins
- The Tipping Point. How Little Things can make a big Difference. Malcolm Gladwell
- Blink. The Power of Thinking without Thinking. Malcolm Gladwell
- Toyota Production System. Beyond Large Scale Production. Taichii Ohno
- The Toyota Way. Jeffrey Liker
- The Executive Guide to Understanding and Implementing the Baldrige Criteria. Leonard & McGuire
- The Executive Guide to Understanding and Implementing Lean Six Sigma. Meisel, Babb, Marsh, Schlichting