



Automotive  
Division

The Global Voice of Quality™

## Can Lean Six Sigma Drive Sales & Lower Costs?

Everyone is muted.  
We will start at 7pm EST.

**Kush Shah, Chairman  
ASQ Automotive Division**



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# Agenda

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- **Housekeeping Items**
- **About ASQ Automotive Division**
- **Our Vision**
- **Webinar Series**
- **Can Lean Six Sigma Drive Sales & Lower Costs?**
- **Questions & Answers**



**Everyone is muted**

**Session is being recorded**

**Session will last about 90 minutes**

**ASQ Automotive members can download the slides and video at [www.asq-auto.org](http://www.asq-auto.org)**

**Participate thru chat and questions**

**Will answer questions at the end:**

- Q&A at the end of the presentation
- Please type your questions in the panel box



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# ASQ Automotive Chair

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## Kush Shah



- **Manager, Global Electrification, General Motors, Michigan, U.S.**
- **Leadership positions in Engineering, R&D, Manufacturing, Quality**
- **20+ years of quality experience**
- **Six Sigma Master Black Belt, Shainin Red X Master, ASQ CQA, CMQ/OE, CQE, CSSBB**
- **Speaker at International Quality Symposiums / Conferences**
- **Trainer for Six Sigma and Quality Management**





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## Global Automobile Outlook – 2020



**>1 billion vehicles - Circle the earth **125 times****

**15% ownership**

**~3% annual growth worldwide**



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## **American Society for Quality (ASQ):**

ASQ is the world's leading professional association and authority on quality

## **ASQ Automotive Division Mission:**

To be the recognized global network of automotive quality professionals that is helping individuals and organizations to achieve personal and organizational excellence



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## Key Objectives of ASQ Automotive Division:

**Increase Member Value** – Webinars, symposium and Automotive Excellence magazine

**Develop Core Tools Competency** – On-site training - PPAP, APQP, FMEA, SPC and MSA

**Global Outreach** – Participate in conferences and deliver training globally



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## Key Objectives of ASQ Automotive Division:

**U.S. Outreach** - Engage all automotive OEMs and Tier 1 & 2 suppliers

**Student Outreach** – Collaborate with universities

**Collaborate With Other Professional Societies** – Engage with other societies and professional organizations





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## Core Quality Tools for Automotive Industry:

Advanced Product Quality Planning (APQP)  
Failure Mode and Effects Analysis (FMEA)  
Production Part Approval Process (PPAP)  
Measurement Systems Analysis (MSA)  
Statistical Process Control (SPC)

**ASQ Automotive Division provides on-site training by certified instructors.**



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## Resources / Contacts:

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**Website:** [www.asq-auto.org](http://www.asq-auto.org)



**Group:** ASQ Automotive Division Group



[twitter.com/ASQautomotive](https://twitter.com/ASQautomotive)



## Joseph A. DeFeo



Joseph A. DeFeo, MBA, President and CEO of Juran Institute, Inc., is one of the world's leading authorities on transformational change systems and breakthrough management principles. During his 25 years as a Juran Executive Coach, he has helped business leaders around the globe increase sales, reduce costs and improve customer satisfaction through the deployment of process improvement programs, including Lean and Six Sigma, strategic planning and cultural transformation.

He is co-author of *Juran's Quality Handbook 6th Edition; The Complete Guide to Performance Excellence, Six Sigma, Breakthrough and Beyond;* and *Quality, Planning & Analysis for Enterprise Results*. DeFeo's belief that a relentless customer focus and integrity drives business results was noted by Forbes.com. 1/25/2012 1/25/2012 *"By re-focusing primary attention on the customer and on exceeding the customer's expectations, the Juran Quality Handbook has done quality management a great service."*

As CEO, DeFeo has ushered in a new age of quality at the Juran Institute by building on universal principles pioneered by Dr. Joseph Juran nearly 60 years ago. His technical expertise and trademark communication style have made him a frequent guest speaker and trainer at conferences in over 30 countries and several institutions, including MIT Sloan School of Management, Columbia University, Wharton School and New York University.

# JURAN®

*The Source for Quality*

## Can Lean Six Sigma Drive Sales & Lower Costs?

Presented by Joseph A. De Feo, President & CEO of Juran Institute, Inc.



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# LSS Must Drive Quality

**Can you explain to  
Executives how LSS can  
increase sales and  
reduce costs?**



# The Changing Role

**What is your role as a quality professional in driving sales?**

**Why is it so easy to see the results but so hard to get execs to understand?**

Just Released Today – More Evidence

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# Costs and Savings of Six Sigma Programs: An Empirical Study

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VENKATESWARLU PULAKANAM  
UNIVERSITY OF CANTERBURY

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# Some of the Results

- Considering gains from customer satisfaction and increased value of sales in excess of resource costs, they concluded that the overall benefits to Baldrige Award applicants outweigh the costs by a ratio of 820 to 1.
- Savings as a Percentage of Revenues: The cumulative savings as a percentage of revenues ranged from 0.02 percent to 6.8 percent, with an average of 1.7 percent (see Table 3 and Figure 1). These savings can be potentially as high as 4 to 7 percent.
- With effective implementation of Six Sigma, a \$100 million organization can expect a direct savings of \$1 million to \$2 million a year for the period.

# Two Sides of the Coin

Customers Demand Both



LSS

Lower prices by  
reducing cost



LSS

More features  
which  
drives sales

# The Methods Today

## Methods



Improve Speed

Sustain Performance

Achieve Breakthrough

## Results

Higher Quality

Lower Costs

Culture Change

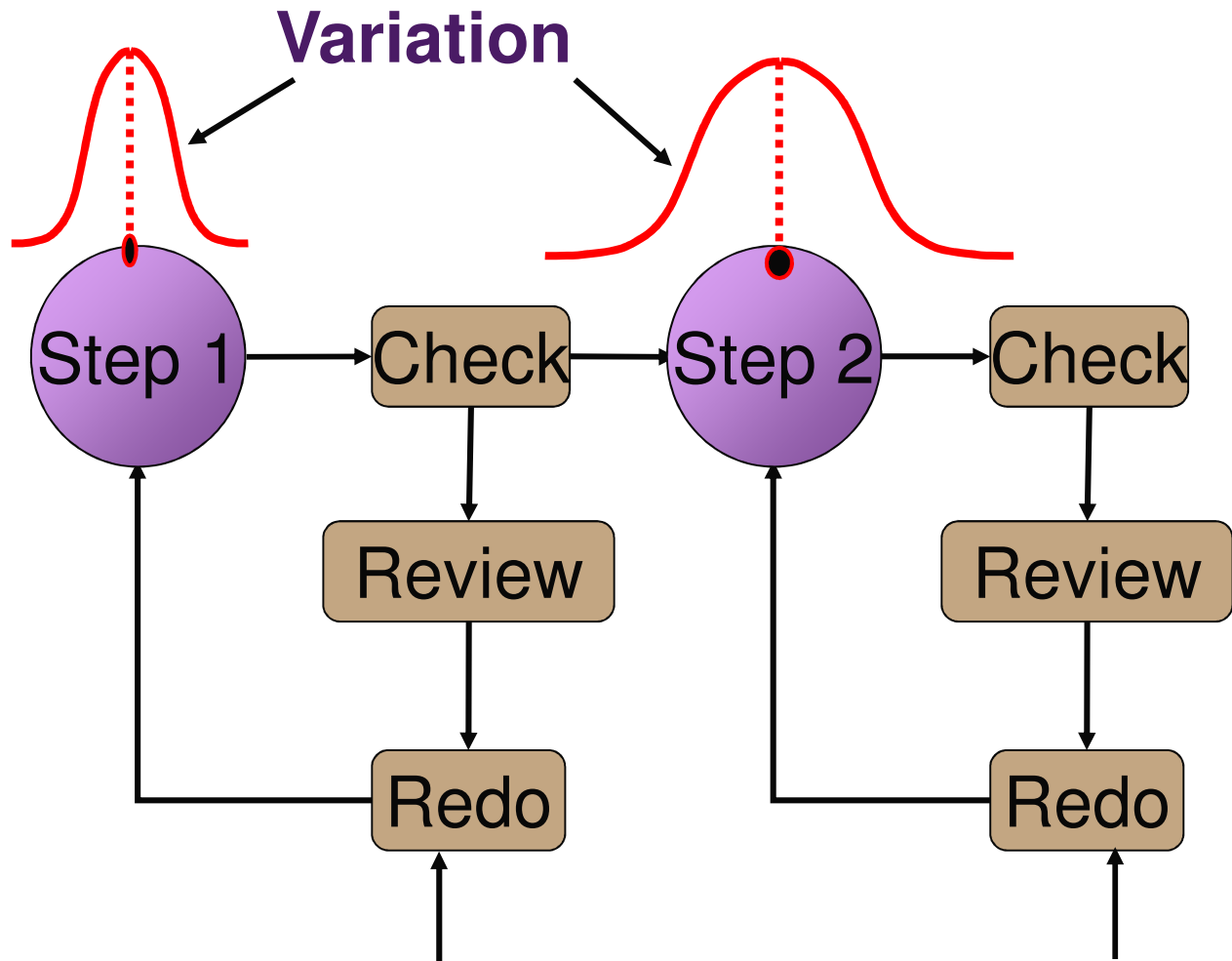
Scorecard Results

What about driving sales  
and lowering costs to customers?



# We know where the cost drivers are – in wasted assets

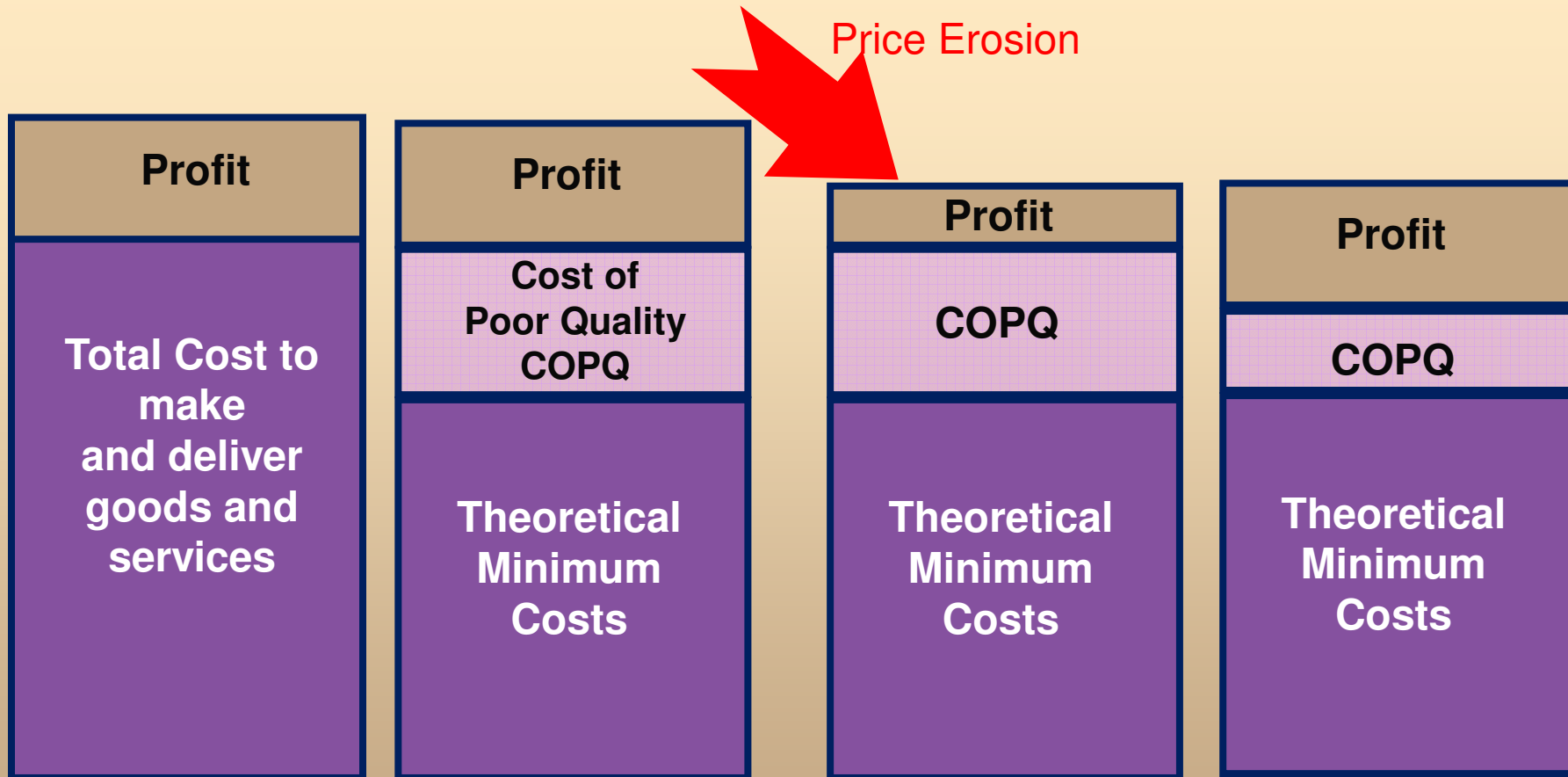
## Exercise: Typical Causes of Waste



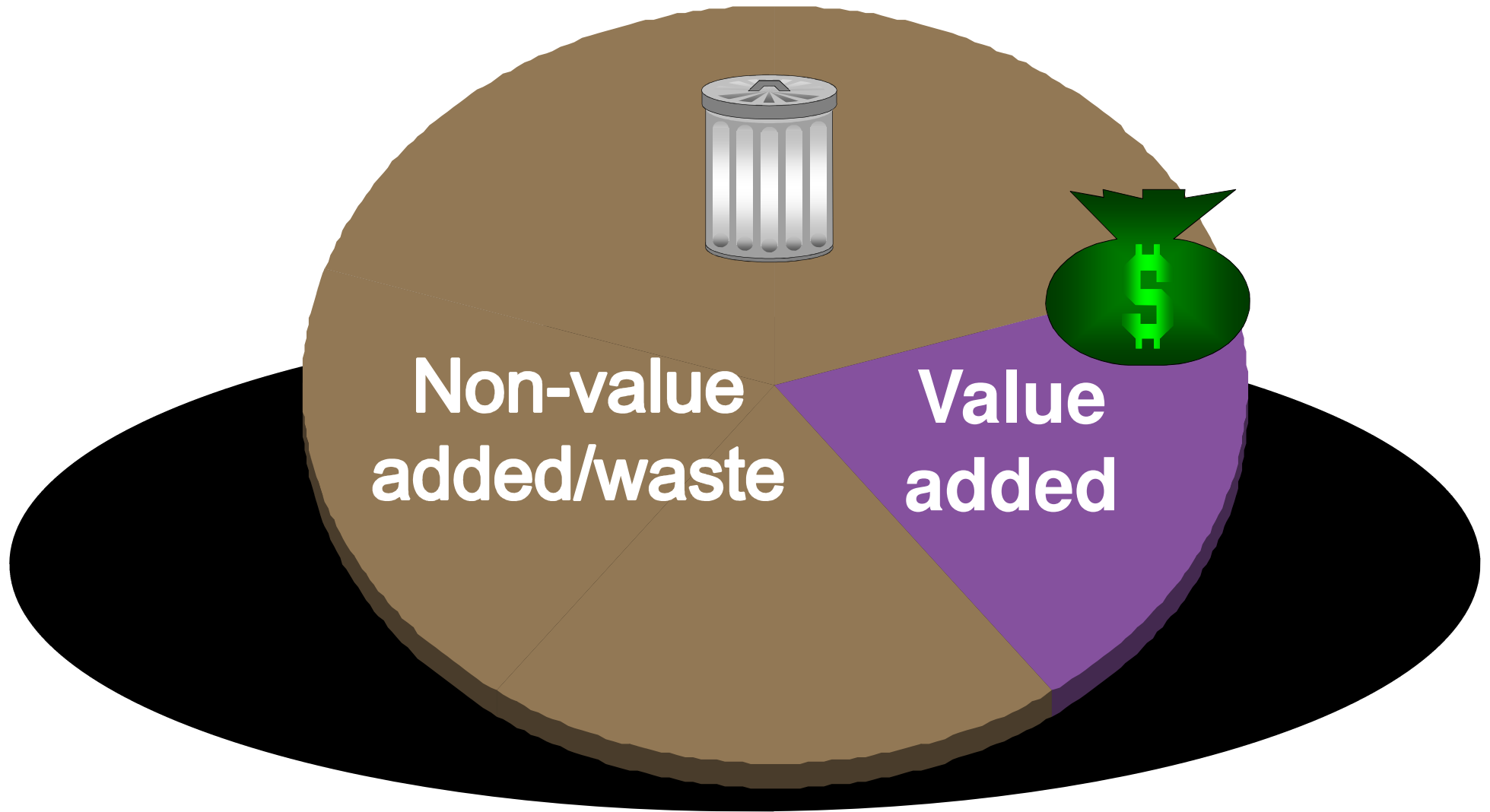
### Chronic Wastes

- Poor Margins
- Unhappy Customers
- Claims
- Added Costs
- Loss of Revenue

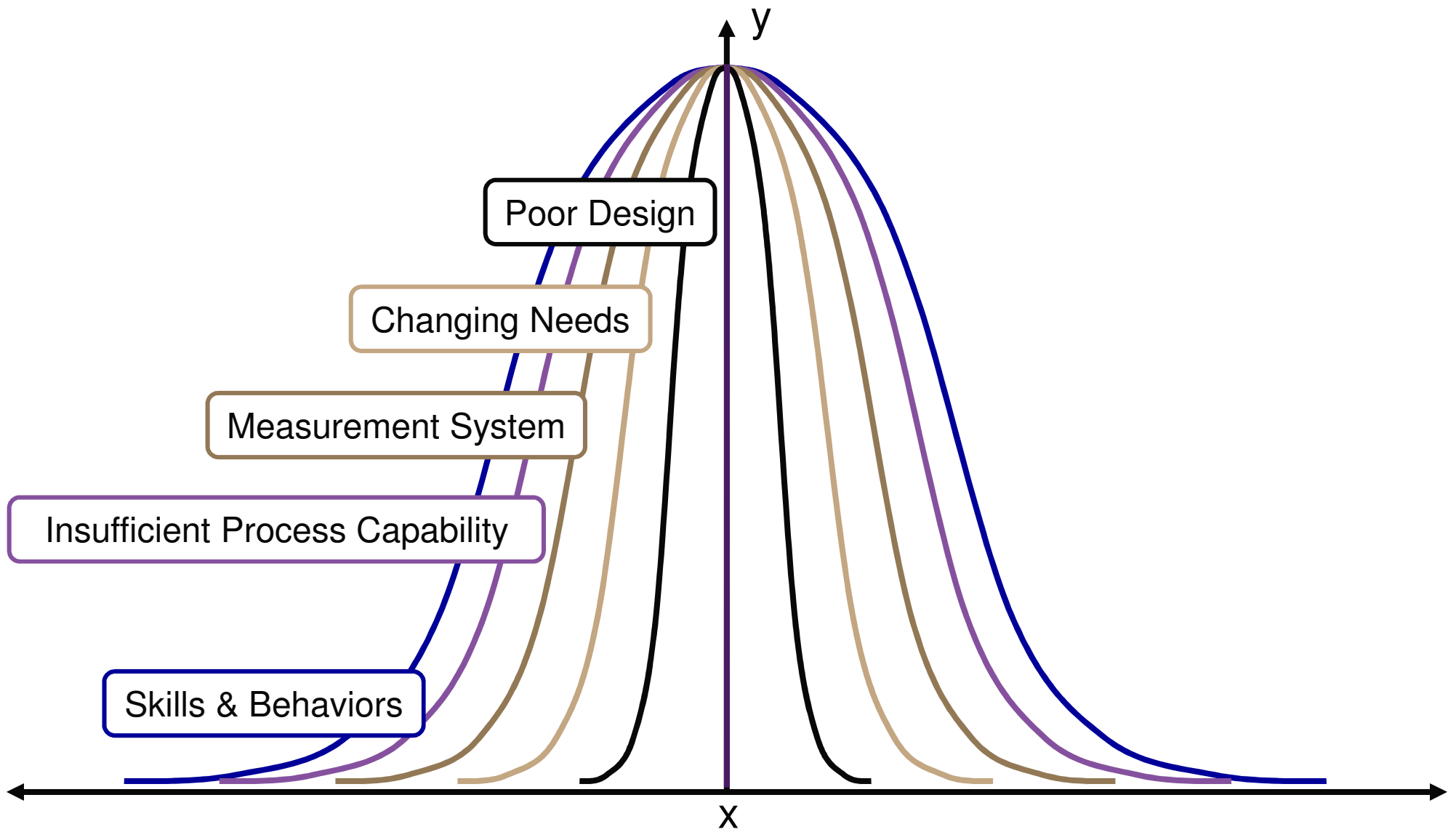
# Profit and Costs of Poor Quality



# Understanding Waste



# Sources of Variation



# Lean Six Sigma Basic Premise

$$Y = f(X)$$

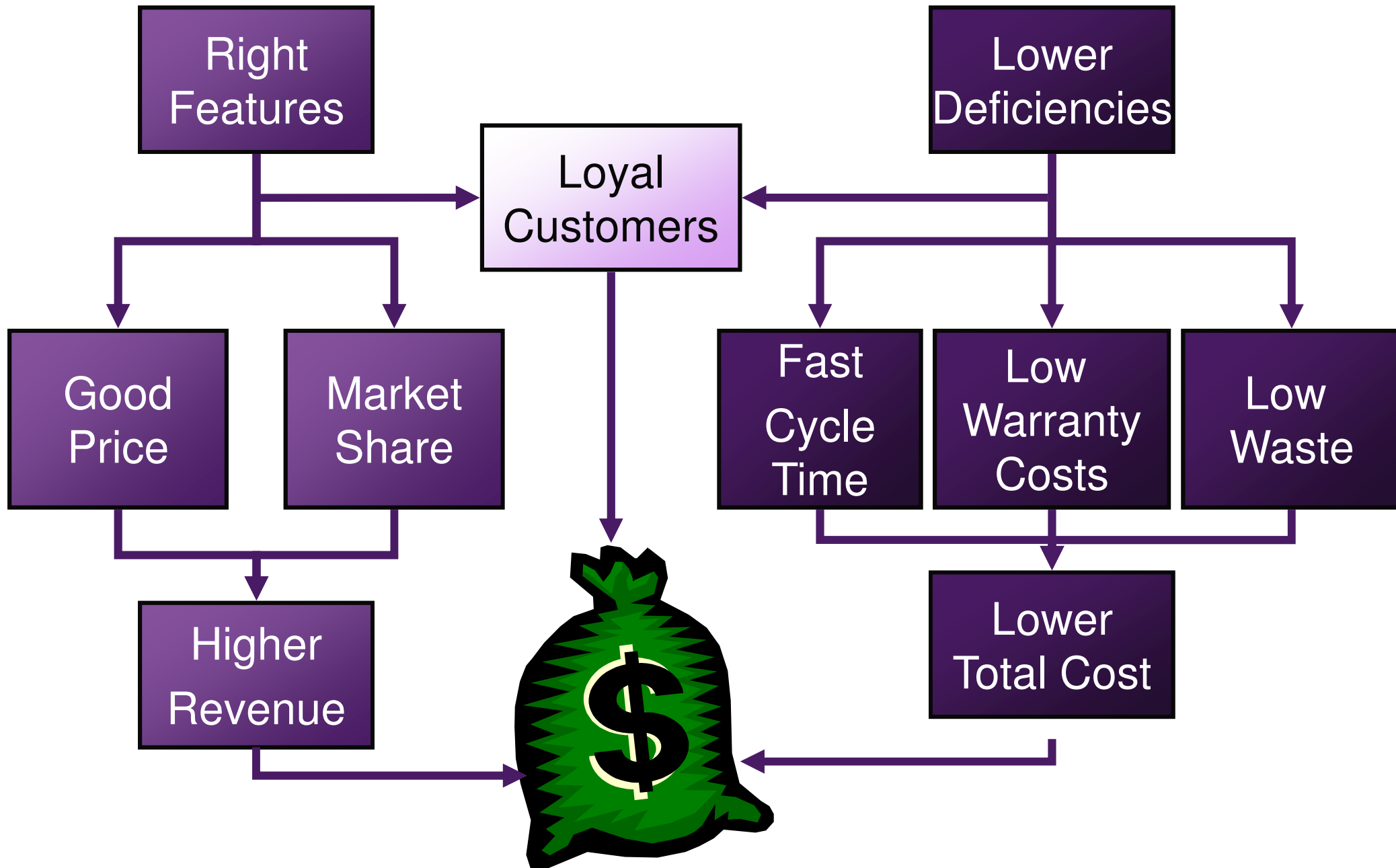
Outputs  
(CTQ)

Inputs

Do you know what is important to customers?  
Do you know what “Xs” are important to  
meet customer needs?  
How do the “Xs” drive outcomes,  
revenue, and cost?



# LSS Should Drive Sales, Speed, and Profit

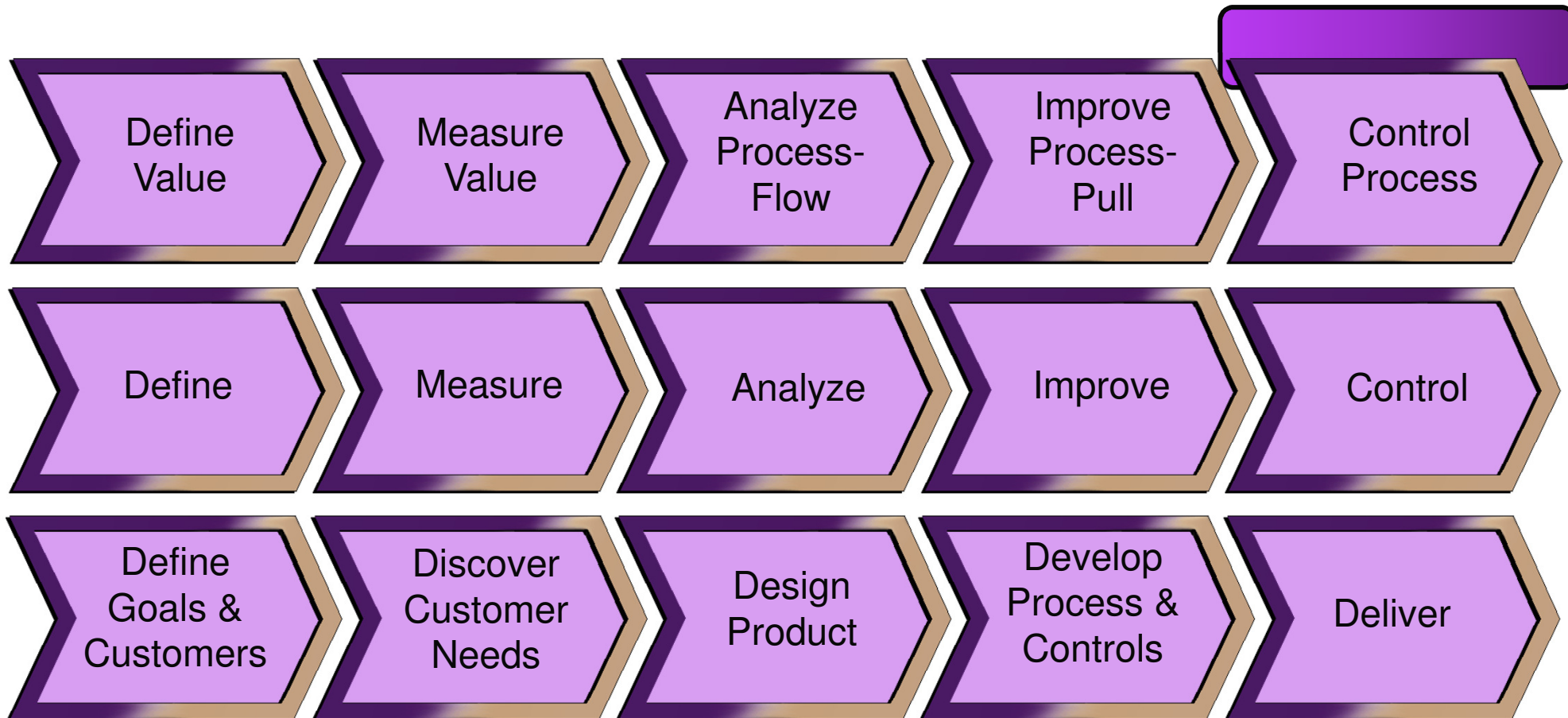


**How does LSS get these desired results?**

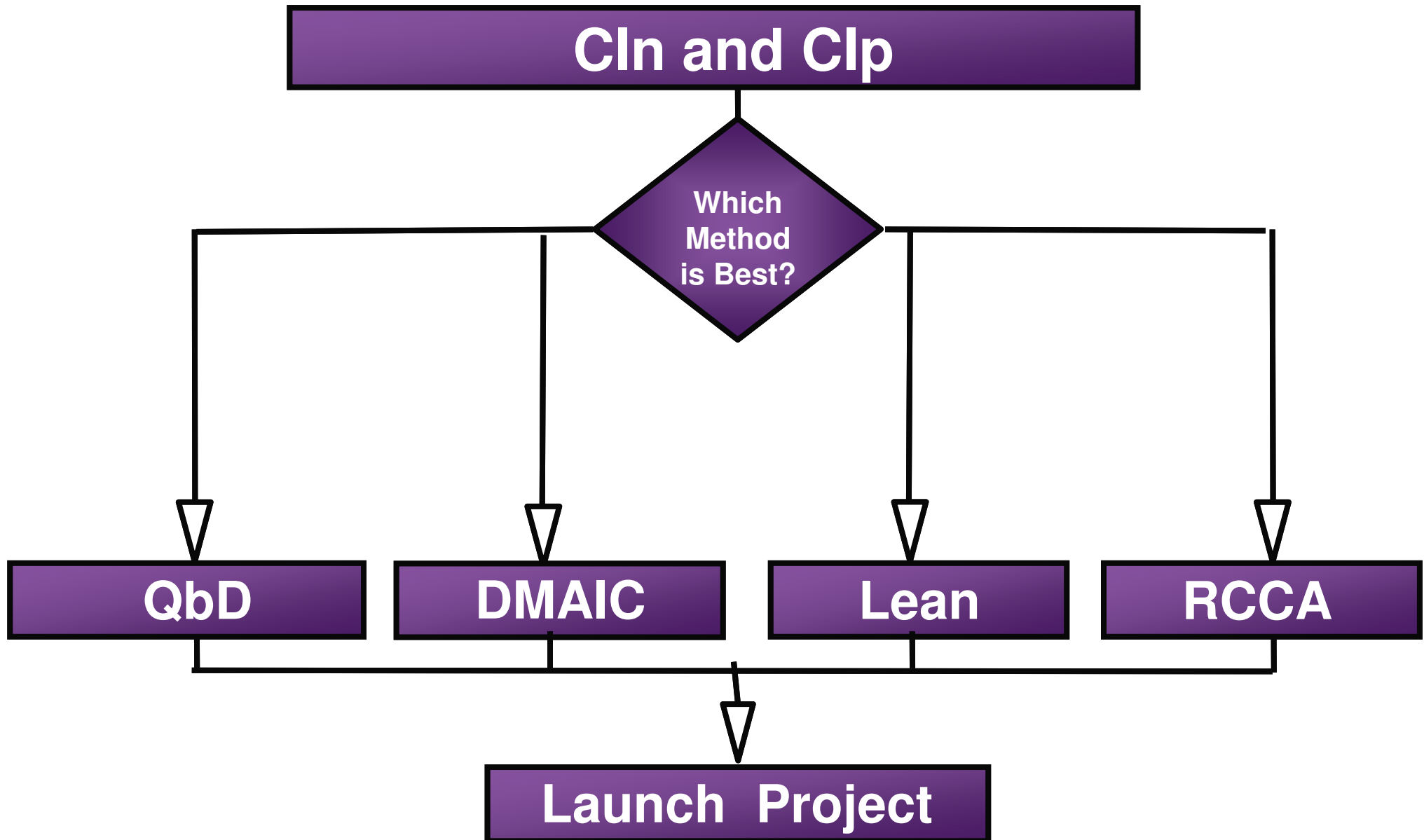
# Lean Six Sigma

**Lean Six Sigma** are complementary and integrated tool sets that create the fastest rate of improvement, maximize results, and increase customer delight.

**All require strong Quality Control**



# Categorize by Method and Charter



# Are You Speaking Their Language?

**Why is it so easy to see the results but so hard to get execs to understand?**

Contact Us to Learn More About Juran Institute Today



*Joseph A. De Feo | President & CEO | [www.juran.com](http://www.juran.com) | 203-241-7059*

THANK YOU





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# Questions and Answers

Please type your  
questions in the panel  
box



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# Thank You For Attending

Please visit our website

[www.asq-auto.org](http://www.asq-auto.org) for future webinar dates  
and topics.

