



MASTER BREWERS ASSOCIATION OF THE AMERICAS

Providing technical leadership for the brewing industry

Quality Management in the Brewing Industry

Mary Pellettieri

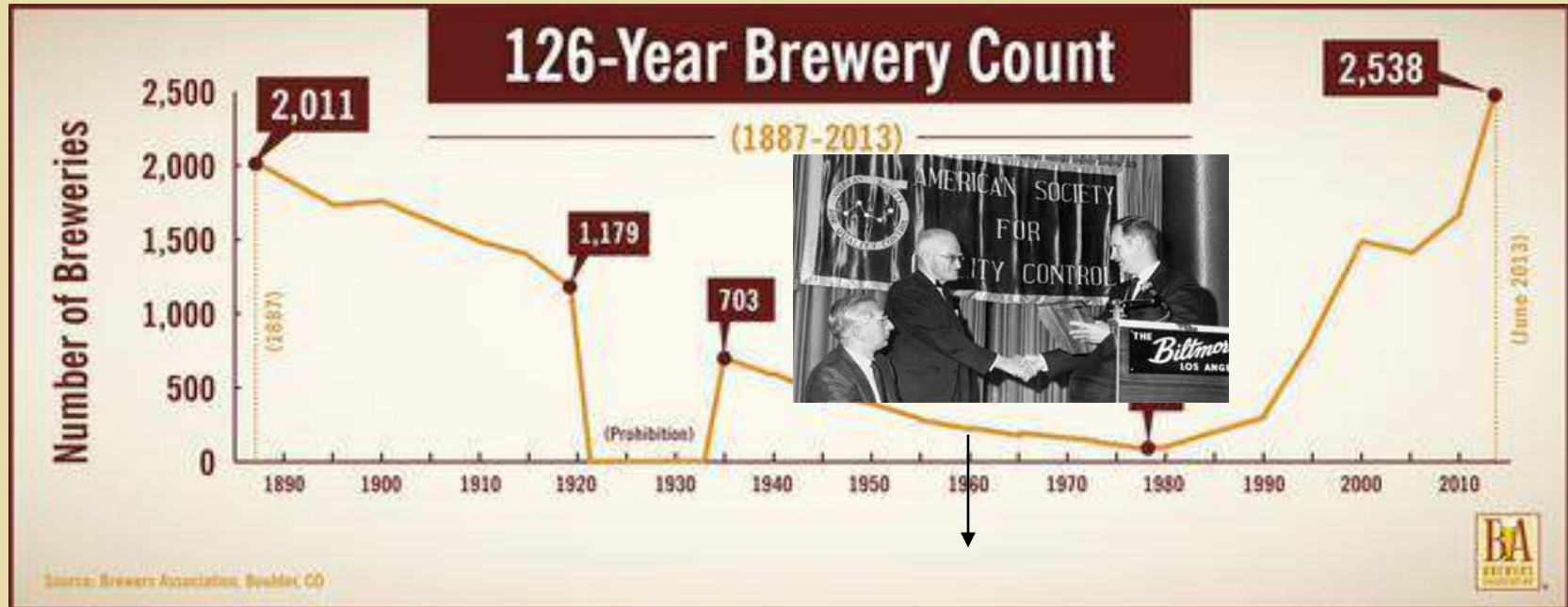
MBAA District NW Meeting

Fall 2015

Some Stats on Brewing Industry Quality

- We measure a lot
 - The “average” brewery can measure anywhere from 50 - 100 different quality checks per batch of beer (based on a calculated assumption 5 – 20 measures/process)
- We waste a lot
 - The “average” brewery will use anywhere from 1:3 to 1:20 beer to water usage. Dumped beer contributes to a higher ratio.
 - Quality losses in breweries can significantly impact the bottom line (spoiled beer in market, buy backs, dump beer, losses in packaging/cellar/brewing etc)
- We don't use worldwide standard approaches to quality management
 - A recent paper on Quality Management in Breweries shows there is not a consistent over-riding business excellence model employed at the very large brewing companies.
 - Some larger craft brewers are embracing Lean/SixSigma/ISO or other standard quality approaches to a quality management system

Quality Management as a Discipline Vs Brewing Industry



Quality Management began to evolve as the brewing industry was shrinking.

By the end of the 1970s quality management principles were being embraced by other manufacturing and industry.

By the 1980s quality principles were beginning to alter business principles towards excellence. Malcolm Baldrige Award 1988.

What Does Good Look Like? Quality Management System

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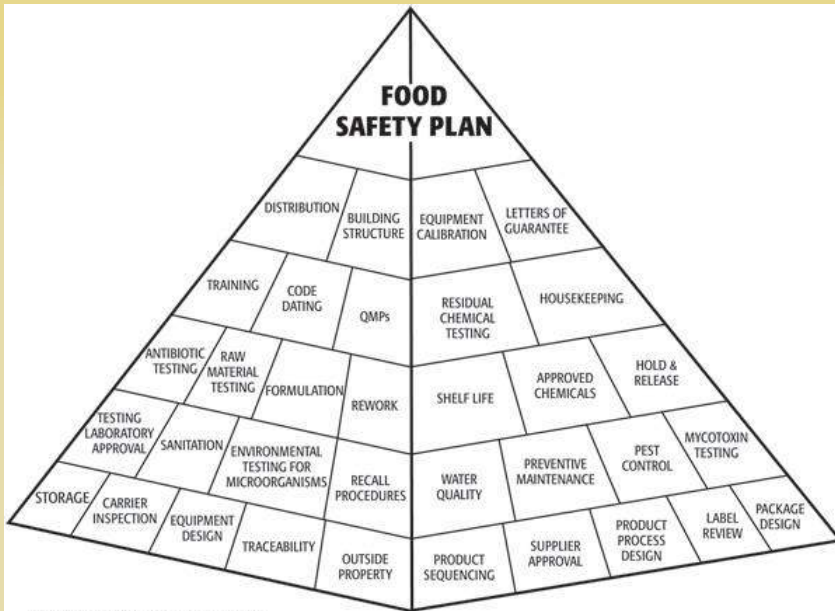


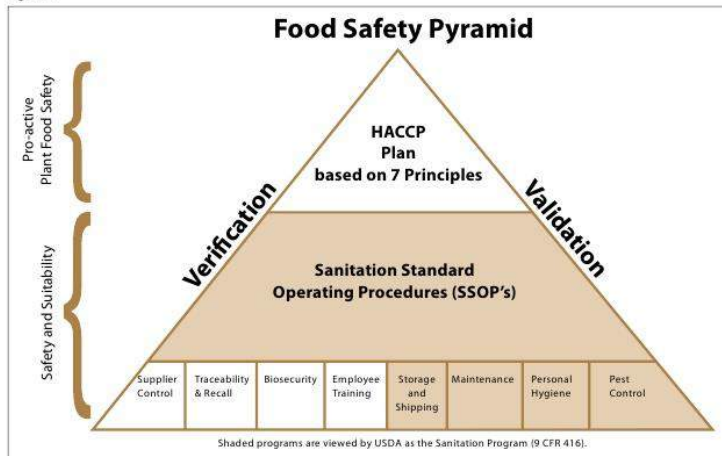
Figure 1: Food Safety (HACCP) Pyramid



Source: Brewers Association Quality Subcommittee

Overview of HACCP (FS-20-W)

Figure 1



Core Benefits of Formal Quality Management System

1. Increased efficiency and consistent quality output
2. Increased revenue
3. Better employee morale
4. Factual Approach to Decision Making
5. Customer satisfaction
6. Audited

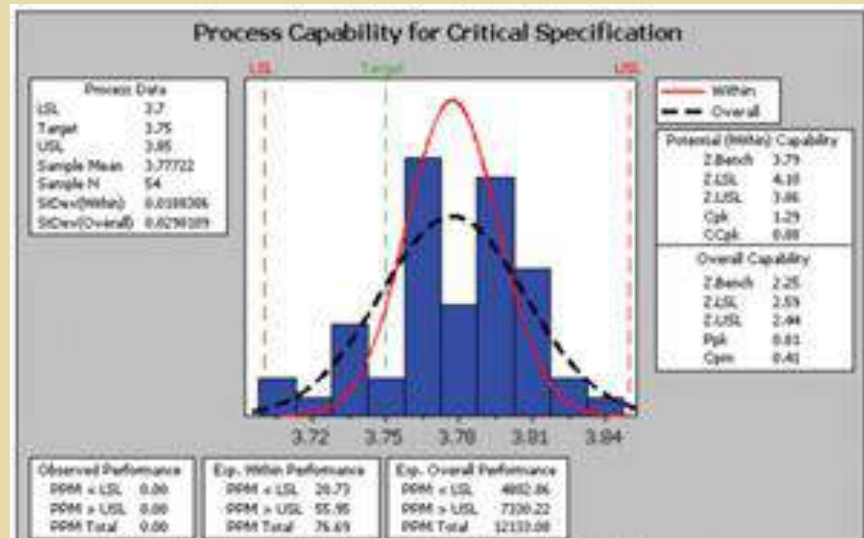


Figure 3. Process capability for critical specification.

Mindset Myths of Implementing Formal Quality Systems

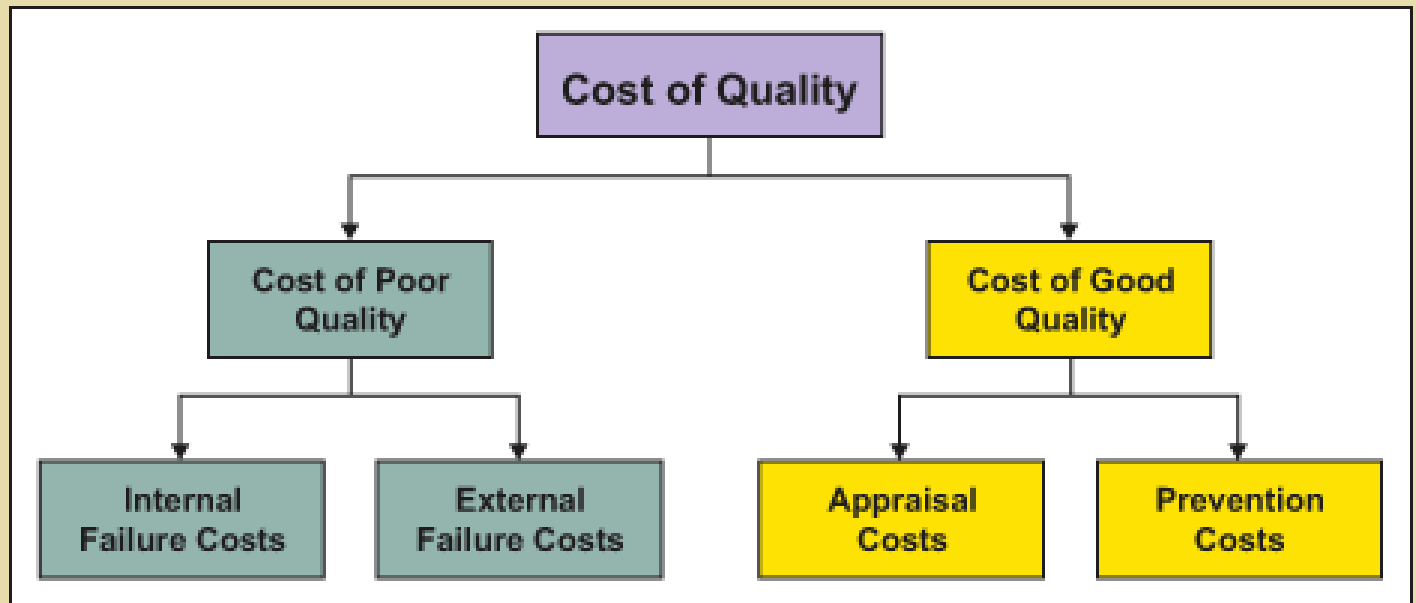
1. A system requires manpower to design, implement and engage in the culture
2. The total cost/time to implement seems overwhelming
3. Relevant training is needed – which adds to costs
4. Entrepreneurial owners fear “constraints” of a system
5. It seems like something only “big” companies should be involved with.

Cost of Quality

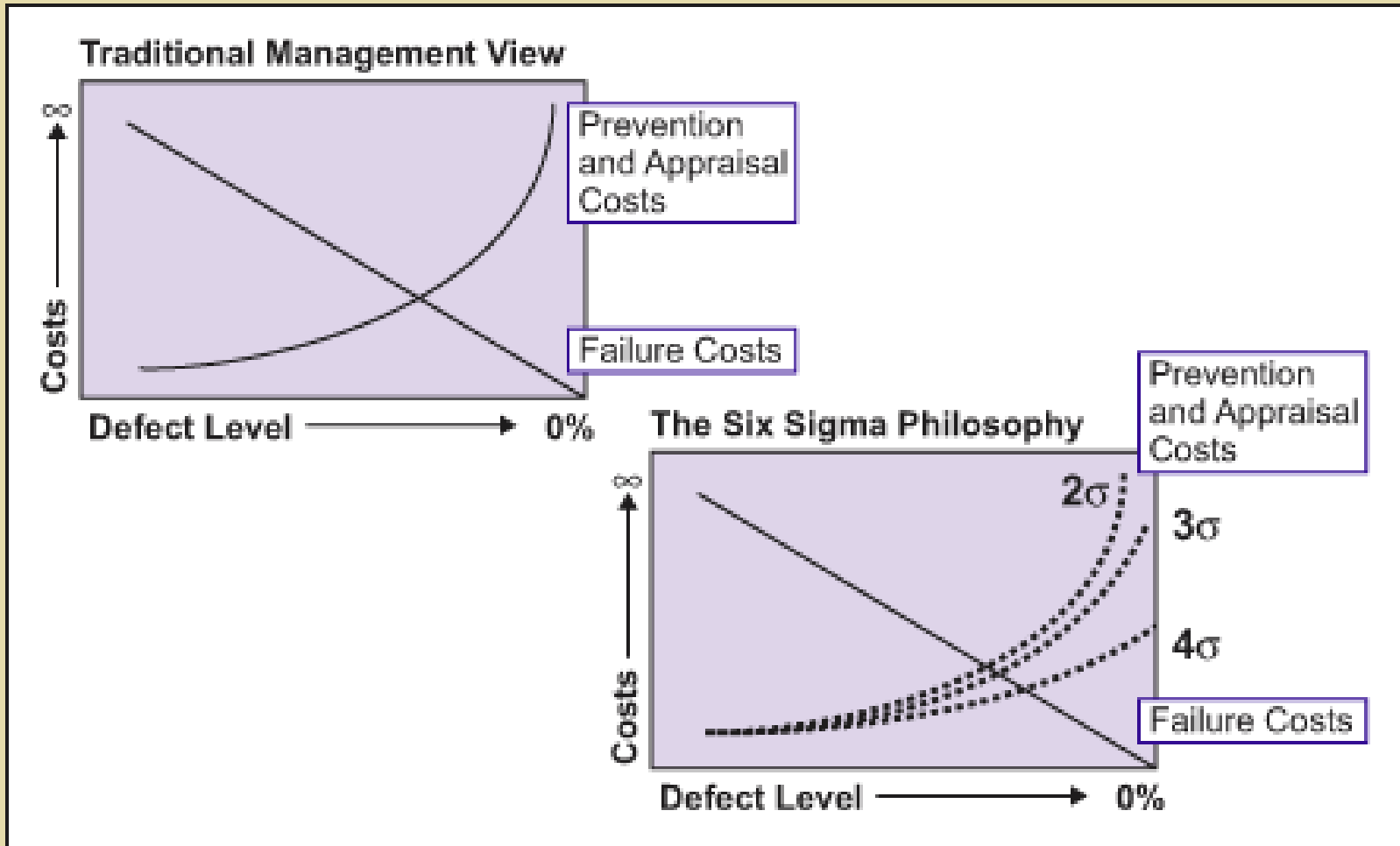
“A company with a highly developed culture of quality spends, on average, \$350 million less annually fixing mistakes than a company with a poorly developed one.”

HBR

Creating a Culture of Quality
Ashwin Srinivasan Bryan Kurey
FROM THE APRIL 2014 ISSUE



The Better The Process The Less Appraisal Costs



How to Get Started

- Get trained
 - Use local ASQ or other body to learn about the options you have.
 - Visit a different plant – food/beverage of similar size and ask for a mentor.
- Plan to share the job
 - Talk to Snr leaders, inform them of quality/safety similarity.
 - Quality management is not 1 person's job. Culturally it has to start from the top down, and be written into every job description.
 - Improvements come from every level.

How to Get Started

- Manage the data
 - Have a place to begin housing data in one format. Share it and begin to use it to make improvements.
 - Don't measure what you can't or won't action
 - Set some goals, then talk about them all the time
 - Safety (No recordables)
 - People (20 Training hours/year/person)
 - Quality (<3 complaints/year)
 - Service (no short/missed deliveries)
 - Cost (No dump beer)



How to Get Started

- Know the role
 - Quality manager is a teacher/risk manager/data hound/process tinkerer/ thought leader.



To be good is noble, but to teach others how to be good is nobler and less trouble.

(Mark Twain)

izquotes.com

How to Get Started

- Document processes
 - SOPs
 - Training each other on best practices
 - Share and learn
 - Use checklists where appropriate
 - Don't be afraid to put something to paper

How to Get Started

- Create your plan to implement a formal system
 - HACCP, SQF – Risk Assessment/Food Safety
 - Lean, Six Sigma, DMAIC – Continuous Improvement
 - ISO, WCM, Baldrige – Overall Company Excellence
- Get well versed/trained on the system you plan to use
 - Plot a 3 – 5 year journey with objectives each year
 - Share internally
 - Share externally in your network on you progress

How to Get Started

- Plan to be audited – this will aid you on your journey and provide a set of standard to guide you
 - GMPs/Sanitation
 - HACCP
 - Organic etc

