Economics of Draught Quality

Improving Retail Quality…
…leads to improved sales and experience.
Economics of Draught Quality

Our mission
To improve the quality of draught beer for all beer drinkers

Our goal:
To make our website information available to as many beverage industry members and consumers as possible, and work toward being the definite draught quality resource for the U.S.A

www.draughtquality.org
Economics of Draught Quality

Bart Watson, Ph.D.
Staff Economist
Brewers Association
Bio:
Bart brings his number crunching experience to brewers to increase craft beer presence in meaningful presentations.

Jeff Schaefer:
Brand Builder
New Glarus Brewing Co.
Bio:
Jeff brings his passion for retail integrity to market after years of beer delivery and sales experience.

Our Resource:
www.draughtquality.org
Education

Training schools offer draught beer principles.
Research market conditions.
CraftBeer.com Poll

“5 Cardinal Sins of Craft Beer Service”
23% of survey “say” Dirty Beer Lines
Prove this study right... … how much money is at stake?
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Prove this study right...  
... how much money is at stake?
Impact on the Market

Extending cleaning frequency past 2 weeks
Lose 2% - 7% (or more) sales
Impact on the Market

Improve cleaning frequency
Increase sales 4% to 7% (or more)
4% to 7% Increase in Draught Beer

For every 100 ½ bbls sold... ADD 4 to 7 ½ bbls
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A Market Opportunity

900,000 bbls of draught beer
4% to 7% Increase
36,000 to 63,000 bbls up for grabs
## A Market Opportunity
### Wisconsin Line Cleaning Company Review 2010-2011

<table>
<thead>
<tr>
<th>Cleaner</th>
<th>Method</th>
<th>Starting Caustic %</th>
<th>Finish Caustic %</th>
<th>Build Up in Jumper</th>
<th>Removed Faucets</th>
<th>Chemical Contact Time</th>
<th>Total Cleaning Time</th>
<th>Total Lines</th>
<th>Flavor Change</th>
<th>System Years</th>
<th>Flakes in Rinse Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Static</td>
<td>12.0%</td>
<td>1.0%</td>
<td>y</td>
<td>n</td>
<td>5 min</td>
<td>25 min</td>
<td>8</td>
<td>y</td>
<td>10+</td>
<td>y</td>
</tr>
<tr>
<td>B</td>
<td>Static</td>
<td>0.2%</td>
<td>0.1%</td>
<td>y</td>
<td>n</td>
<td>15 min</td>
<td>45 min</td>
<td>8</td>
<td>y</td>
<td>8</td>
<td>y</td>
</tr>
<tr>
<td>C</td>
<td>Static</td>
<td>0.4%</td>
<td>0.2%</td>
<td>y</td>
<td>n</td>
<td>6 min</td>
<td>35 min</td>
<td>6</td>
<td>y</td>
<td>5</td>
<td>y</td>
</tr>
<tr>
<td>D</td>
<td>Re-circulate</td>
<td>0.3%</td>
<td>0.3%</td>
<td>y</td>
<td>y</td>
<td>10 min</td>
<td>30 min</td>
<td>6</td>
<td>y</td>
<td>3</td>
<td>y</td>
</tr>
<tr>
<td>E</td>
<td>Re-circulate</td>
<td>3.0%</td>
<td>2.5%</td>
<td>y</td>
<td>y</td>
<td>15 min</td>
<td>45 min</td>
<td>6</td>
<td>n</td>
<td>3</td>
<td>n</td>
</tr>
</tbody>
</table>

*Yellow = Area to improve “aka” not to BA Recommendations*

Be sure cleaners are following **Brewers Association Recommendations!!!**
## A Market Opportunity

<table>
<thead>
<tr>
<th>Condition</th>
<th>Temperature</th>
<th>Pressure</th>
<th>Equipment</th>
<th>Improper Pour</th>
<th>Glassware</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wild Beer</strong></td>
<td>Too Warm</td>
<td>Too High</td>
<td>Needs Cleaning</td>
<td>Check Pour</td>
<td>Ice Inside Of Glass</td>
</tr>
<tr>
<td>Beer, when drawn,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>is all foam, or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>too much foam and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not enough liquid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>beer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flat Beer</strong></td>
<td>Too Cold</td>
<td>Too Low</td>
<td>Needs Cleaning</td>
<td></td>
<td>Detergent Film Inside Of</td>
</tr>
<tr>
<td>Foamy head</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glass</td>
</tr>
<tr>
<td>disappears quickly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>beer lacks brewery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fresh flavor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cloudy Beer</strong></td>
<td>Too Cold</td>
<td>Contaminated CO₂ Gas</td>
<td>Needs Cleaning</td>
<td></td>
<td>Needs Cleaning</td>
</tr>
<tr>
<td>Beer in glass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>appears hazy, not</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>False Head</strong></td>
<td>Too Warm</td>
<td>Too Low</td>
<td>Check Pour</td>
<td></td>
<td>Household Detergent And Dust</td>
</tr>
<tr>
<td>Large soap-like</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bubbles, head</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dissolves very</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>quickly</td>
<td></td>
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</tr>
</tbody>
</table>
Another Cleaning Solution - This chemical has the ability to **Change Color** in relationship to organic build up in draft lines.

Starting at Purple/Pink changes to Green/Blue or to a Yellow/Orange in heavy build up lines.
Cleaning Example
With Chemical Understanding
A Market Opportunity

Brewers Association Draught Quality Recommendations
Every Retailer needs to be updated.
Every Line Cleaner needs to be updated.
Every Brewery Representative needs to be updated.
Every Distributor Representative needs to be updated.
Every Affiliated Draught Company needs to be updated.
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Case Study

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A Natural Experiment

• In September of 2012, a U.S. wholesaler purchased a local draught line-cleaning business. Can compare:
  – Accounts using the line-cleaning service, vs.
  – Those that do not
Strong Opportunity

• Both accounts are relatively large
  – Line-cleaning accounts $> 40,000$ barrels annually
  – Other accounts $> 120,000$ barrels annually
  – No other known differences
    • Same area, beers, etc.
Control Period (Before): Growth in Volume Sales Q1 - Q3, 2011 to 2012

Difference = 2%
Test Period: Growth in Volume Sales Q4 2012 - Q2 2013 Versus Previous Year

- **Expected Difference = 2%**
- **Additional Growth = 2.9% (3.9% annualized)**

**Legend:**
- Cleaned Accounts
- Control Accounts
3.9% Annual Growth

- At 132 servings in a keg
  = 5 additional pints per keg per year

- Across the Cleaned Accounts that's
  - over 450,000 pints/year

- Control Accounts, it represents almost
  **1.3 million pints a year in foregone growth**
  - Almost 5,000 barrels in lost growth across accounts
    that are > 125,000 barrels
Doing the Math...

- More frequent cleaning = 5 new pints/keg
Doing the Math...

• Typical Scenario. Assumptions:
  – 4 lines
  – Retailer cleaning themselves (instead of service)
  – Standard cleaning liquid
  – 4 hours to clean (likely faster)
  – Moving from two-month to two-week cycle
Does Entail New Costs

• Net Cost of lost beer = $217.69
  – This is less than 1% of total beer cost
• Net cost of labor = $800
  – May be cheaper with cleaning service; retailers often do not bear cost
• Net cost of cleaning materials = $371.65
  – May be cheaper in bulk
• Total Net Cost = $1,389.34
FAR Outweighed by New Profits

5 pints/keg x $3.41 profit/pint x 52 kegs/year/line =

$886.60 profit/year/line x 4 lines =

= $3,546.40 in new profit
Total Net Profit

• Under this scenario, moving from two-month to two-week cycle generates:

• Total Net Profit = $2,157.06 ($539.26 a line)

• Can re-work assumptions to increase costs

• Even with the most extreme set of assumptions, retailers are projected to reap new profits from frequent line cleaning
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Kegs have cost savings vs. bottles
Draught Quality $$$

Case of 24, 12 oz bottles = $26.40
Need 6.88 cases = ½ bbl @ $120.00
$181.63 cost of bottles vs. ½ bbl

$181.63 bts - $120.00 keg = $61.63 per keg
1 Line @ 1 Keg Week...

$61.63 x 52 weeks = $3204.76 YR
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Questions?
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