

AB InBev Investor Seminar
November 14th, 2013
Pete Kraemer, VP Supply – Supporting the top line

As North America's Chief Brewmaster, it's my job to support the Top Line by working hand-in-hand with marketing and sales. To give you a little background on myself, I am a 5th generation brewmaster, 3rd generation at Anheuser Busch and I'm enjoying my 25th year of brewing the king of beers.

This slide describes the key messages I'll deliver in my presentation today. The most important point I want to make is that Quality is Thriving. Not only do I and my team of Brewmasters and engineers work tirelessly to brew great beer, but we are fully integrated with our commercial team and work hand-in-hand to seamlessly drive our commercial agenda.

We have an incredible variety of tools with which to innovate and commercialize the great ideas we develop. Our management system called Voyager Plant Optimization, or VPO, is a critical component of our success as it allows us not only to operate at world-class efficiency levels but more importantly deal with the complexities of innovation in an organized way.

And finally, I have a couple case studies to showcase how our facilities fully leverage their strengths to create competitive advantage. We have a deep-rooted culture of brewing great beer at Anheuser-Busch. At our senior brewmaster level, we have over 600 years of brewing experience and we apply this expertise to deliver superior tasting beers day-in and day-out, as well as to deliver innovative, new styles, all critical to drive our top-line agenda.

The taste rooms you see in the pictures prominently exist in all our breweries and are where I and my brewmasters do our best work. The most important measure of our success is the taste of the beer, so we take the task of tasting seriously.

I and my team of engineers and scientists are fully integrated with our Commercial team from design, through scale-up and commercialization, to deliver our innovative new products as well as to deliver our established portfolio of brands to our wholesaler network day in and day out.

We have incredible capabilities to innovate in all parts of our process from raw materials to packaging. We start with our raw material inputs, beginning before the barley farmer has planted seed by breeding our own barley varieties in our Ft. Collins research center. And it's not just barley. We also guide the USDA hop breeding program for this unique and vital brewing ingredient.

As the industry leader, we do this type of work to not only ensure quality and supply for our base operation, but more importantly as a source of competitive advantage by giving us unique insight into flavor development for exciting new products. We grow 10% of our hops, malt 50% of our barley and mill 95% of our own rice. Sure this has an effective business purpose to ensure quality and costs are managed, but the benefits go much further. Growing hops enables us to have unique and interesting hop varieties available for our innovative new beers being developed for Budweiser, Goose Island, Shock Top and many others.

Let me show you our hop farm in Idaho [video plays].

Developing skills as a maltster gives us unique insight into creative new possibilities for innovation with key raw materials. Beyond our top-line agenda, our strategy for vertical integration requires we deliver the highest quality and lowest cost in the industry. We use global benchmarking to ensure our costs are competitive and give us a benchmark to improve upon.

Benchmarking in a large, global company like ours is of particular value because of the extreme diversity of the regions of the world where we operate. Most every region has some sort of a restriction which forces you to become an expert at managing that scarcity. For instance if you are in a country with a high cost of capital, you become very good at making capital investment dollars go further, usually through innovative design and efficient installation methods. If you are in an area with high energy costs, you become very good at conservation. It's this benchmarking database and open access to all global sites that really makes a difference.

Our core technical knowledge of brewing, fermentation, filtration, and packaging is by far the best in the world and serves us well when we develop anything from our beloved classic Budweiser Lager, to Lime-a-rita, to Shock Top Seasonals, all the way to the extreme of barrel-aged Goose Island Vintage.

We have a world-class research pilot brewery that is fully utilized developing our innovations. The research brewery is also designed to scale-up our experimental beers to a large brewery size with perfect accuracy, so we know that our success in product development translates seamlessly to a larger-scale. We closely track our taste scores for Budweiser brewed in the Research Pilot Brewery relative to Bud brewed in our larger-scale breweries. This taste tracking tool is used by our pilot brewery brewmaster to ensure the taste is consistent and indistinguishable with all sister breweries which is an absolute requirement to guarantee successful scale-up. Many of our Goose Island seasonals designed by Goose Island Brewmaster Brett Porter are developed by Brett using the Research Pilot Brewery.

We have advanced capabilities in brewing, fermentation, yeast cytology, flavor development, nanofiltration as well as different lagering and aging technologies to meet the wide spectrum of products we brew. Although the beer brewing process itself has remained stable for hundreds of years, the methods we use to ensure quality and consistency are the most advanced available. Our control systems also give us a constant stream of data from which we can improve our quality, capabilities and costs with much better visibility into our process.

While the explore and innovation processes are exciting and glamorous, we are careful not to lose sight that the routine is 95% of our business and we must operate a complex set of breweries and other businesses at a very efficient level 24-7-365. This is where our management system, called VPO fits in. We closely and effectively manage our process and our costs using the VPO tools and over time have built a productive and exciting culture of continuous process improvement.

I put a couple of graphs on this page to highlight a couple of key points. If you look at the graphs

on the top of the page, you will see the evolution of 2 of our KPIs that are value drivers for us, extract loss and water usage. Over time we have been able to consistently drive improvement. It truly is the VPO management system that gives us the standardization at the operator and machine level which leads to incredible control and consistency resulting in high quality and low cost.

We also invest in automation, which ensures our skilled labor is as productive as possible. If you look at the bottom right graph you will see how our facilities compare globally on productivity. The blue lines represent the US breweries and you can clearly see that our breweries are quite productive.

It's no surprise that a heavy explore and innovation agenda can challenge a network of breweries. We have an organized approach to managing complexity that focuses on having a solid and robust operating base that can handle surges in demand; a well-managed implementation process to ensure projects are commercially ready; operational agility that enables quick recovery from product changes, great network planning tools that efficiently allocate volume, and last-but-not-least, a good system for rationalizing low-value, highly complex SKU's.

A great example of how we have been able to leverage our technology for quality improvement is through the application of best practices to our operation as well as the development of oxygen-scavenging technology in our crown-liner manufacturing facility, called Eagle Packaging.

I put a few graphs together to show you how we leveraged the knowledge we have in the US about freshness to improve the quality of our beers in Canada. The graph on the left shows the evolution of oxygen in a filtered beer tank before packaging. The graph in the middle shows the evolution of oxygen in the package after it is filled.

By using best practices and state-of -the-art measuring tools we have been able to significantly reduce the amount of oxygen present in a newly-filled package. We also have a proprietary technology that we use in our bottle caps to prevent oxygen from entering the package after filling by migrating sideways through the plastic liner that seals the cap. This is another technology that we developed in our crown liner business which is another clear benefit of vertical integration. The net result and most important point can be seen in the graph on the right. These are freshness taste scores from expert panelists trained in evaluating the freshness of beer. The scores have dramatically improved over time with the application of the techniques I just described.

Another case study that showcases our ability to link vertical operations to additional value for our company is one from our can and lid manufacturing business- Metal Container Corporation or MCC. We mapped out the industry landscape for can and lid manufacturing. This enabled us to identify new value drivers for the business and set new tactical and strategic priorities for the business that greatly increased value for our company.

The graph in the bottom left shows how we better coordinated seasonal demand and brewery

capabilities to maximize our capacity utilization. The picture on the top right shows some new packages that we now manufacture at MCC that create better value than we could buy in the commercial market. These interesting new packages are of incredible value in our commercial and innovation agenda in the beer business. We have invested significantly in our MCC operations, over 200 million dollars to not only produce these innovative new packages, but to also stay competitive and efficient with important measures like can weight. And finally, the fruits of our labor have led to a dramatic improvement in profitability of MCC, a reward which comes on top of all the benefits from selling innovative new packages for our beer brands.

So in closing, quality is thriving, my team is fully integrated with our commercial team, we have an incredible variety of tools with which to innovate and commercialize the great ideas we develop, our VPO management system allows us to operate at world-class efficiency, and We fully leverage our facilities to create competitive advantage.

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