

AB INBEV'S INVESTOR SEMINAR 2018
JOHANNESBURG, SOUTH AFRICA
TUESDAY, 7 AUGUST 2018
CHIEF SUPPLY OFFICER – PETE KRAEMER

Bio slide#2

Good afternoon, my name is Pete Kraemer.

I come from a family of brewers and I have been with our company my entire career, starting in 1989 as Group Manager in our Tampa brewery and assuming increasing positions of responsibility in Supply until I became Chief Supply Officer and Chief Brewmaster in 2016.

I'm proud to share with you some of our noteworthy accomplishments within our company's Supply, focusing on the things we learned from our colleagues from SAB.

VPO/DPO slide#3

We run our Supply and Logistics operations based on two comprehensive management systems:

VPO, which stands for Voyager Plant Optimization and
DPO, which stands for Distribution Process Optimization.

These management systems have been optimized since 2002 and give us the tools we need to assure our operations run efficiently, achieving continuous and sustainable performance improvements.

House of VPO slide#4

VPO and DPO cover all pillars of the Supply Chain, from Safety to Quality to Line Performance, with clear and simple requirements to be applied all the way down to the shop floor.

These systems also explain a comprehensive and effective Management process, enabling our leaders to successfully manage our Operations, leading and engaging our People to brew great beer and run world class operations.

SAB also had its own Management System called GEM, Global Evaluation of Manufacturing.

Last year, we rewrote the VPO and DPO manuals capturing the Best of Both AB-InBev and SAB management systems.

GEM added a lot to VPO, in the areas of maintenance and shop floor engagement, creating the ever-powerful management system that we all use today.

I am passionate about VPO and DPO, and I believe they are the fundamental reason why our Supply Chain is a true Competitive Advantage for AB-InBev.

Safety First slide#5

The Safety of our People is our #1 priority and our dream is to run an Accident Free Supply Chain.

The relentless execution of the Safety Pillar has resulted in consistent accident reduction.

This chart shows you how the number of LTIs, or Lost Time Incidents, have decreased at our company by almost 80% and more than 90% in Mexico.

From day 1 after the integration with SAB, the team focused on implementing the Safety Pillar in all operations.

We installed safety management support structures at the brewery and zone level, implemented VPO technical safety requirements, set challenging safety targets and held managers accountable for safety performance.

As a result, we were able to reduce accidents by half in the first year.

Quality Always slide #6

We strive to have the Best and Freshest Beers in the Market

Our Quality program is focused on the consumer experience. We use detailed data from consumer contacts to guide us on improvement opportunities.

We track every concern to the root cause, act on it and update our standards accordingly.

Since 2012, we have been able to reduce Consumer Complaints by 45%.
The taste of our beers is our most cherished objective.

While our process and lab data can measure certain things, there is no substitute for trained brew masters tasting the beer they brew.

At our breweries we have a rigorous tasting process with trained tasters who take their job very seriously.

Our brew masters taste every batch at every step of the brewing process to ensure flavor, consistency, drinkability and brand profile.

We also use taste to measure consistency from brewery to brewery at the zone and global level to ensure consistency across the globe.

This picture is from our global taste panel in St Louis where we taste all our Global Brands.

From SAB we learned the importance of “Quality at source”, where operators complete their own quality checks, right on the line.

This creates a powerful sense of responsibility and ownership at the operator level that is an important part of our quality system.

This combined with our tasting methodology has given us unparalleled beer quality across our company.

Efficiency is a must slide #7

Supply Chain efficiency is part of our DNA.

We measure our packaging line efficiency using two primary metrics:
GLY, or Gross Line Yield and
LEF, or Line Efficiency

In 2016, we defined our dream to achieve 70% GLY and 90% LEF based on best-in-class benchmarking,
which meant an improvement of 10 percentage points.

An efficiency gain of this magnitude can drive up to \$190 Mio Cost of Sales savings and \$1.7Bio in capacity investment avoidance.

To achieve these ambitious results, we are leveraging SAB best practices in maintenance, people and management; defining actions towards shop floor execution; maximizing benefits from packaging & maintenance routines and utilizing technology to help identify and resolve issues.

Technological advancements slide #8

We have a Global Innovation and Technical Center, that we call GITeC, based in Leuven that works in sync with the 9 Zone Innovation and Technical Centers, called ZITeCs.

All innovation and technical development efforts within Supply are run by these centers of excellence.

All projects are captured in a Project Management tool called Pegasus, which allows effective collaboration and utilization of best practices between the family of innovation and technical centers.

Today, we have proudly achieved several technical advancements resulting in hundreds of patents.

There has been an extensive exchange of technology between AB InBev and SAB, through these centers.

On the left side of the slide, you can see an illustration of the SAB Simmer & Strip patented

technology that allows us to save 50% of the energy used in the brewhouse which equates to a 10% overall energy savings in the brewery.

This expertise is patented and we are offering free licenses of this technology to small brewers as a gesture of good will in the small brewer's community.

It is a good example of how new technologies help the bottom line, generate tax savings and improve Sustainability and Reputation.

AB InBev has deep knowledge in no-alcohol beer based on patented proprietary expertise.

Africa utilized this technology to launch new products such as Castle free 0,0 inspired from AB InBev products.

This is another good example of proprietary technology used for top line growth and smart drinking goals.

Champions slide #9

Champions is our internal process where Supply and Procurement teams work together to identify initiatives and best practices to reduce our Cost of Sales and Distribution Expenses.

This is a true bottom-up process that starts at all our operating sites, culminating with a Global Champions week that just took place a couple of weeks ago in St Louis.

During this Champions week, more than 400 specialists, our best people from across the globe, discuss better ways of operating, generating close to 8,000 initiatives valued at approximately \$800 Million.

These initiatives are tracked in our, Global Champions Tool, where every initiative has an owner, timeline and commitment to make it happen.

This Champions process was crucial for us to capture the Synergies from SAB integration.

All synergies identified during the Integration process were mapped, entered into our Global Champions Tool and followed with a bi-weekly management review.

And there were a significant amount of what we call "Reverse Synergies", that we were able to capture within legacy AB InBev.

Champions is a great example of our Company principle "acting as owners".

(Part 2)

Transition to Beer Heritage

This is what I wanted to highlight to you about Supply. I would also like to share with you the passion for Beer that I and my colleagues have, here at AB InBev.

10 Principles (Slide 11)

These are our 10 brewing principles.

These are our truths, our beliefs as Brewers, the principles we live by.

Let me take you through each one of them.

We Are All Brewers (Slide 12)

But first, let's remind ourselves:

Beer is the 5th most consumed beverage in the world, after water, tea, coffee and orange juice.

Beer is the #1 alcohol beverage in the world.

About 14,000 pints of beers are consumed every single second across the globe.

Beer Brings people together.

We Are All Brewers (Slide 13)

And Passion for beer is our life.

A German Philosopher, Georg Wilhelm Friedrich Hegel, said "Nothing great in the world has been accomplished without passion."

We have more than 1,000 brew masters sharing their passion in a contagious way in our organization.

It's that passion that fuels the great ideas and programs that drive our success.

Heritage (Slides 14)

The Heritage of beer in society runs deep.

Anthropologists confirm that the reason humans changed their lifestyle from Hunter Gatherers to Settlers, is beer.

The objective of cultivating grain was indeed to make a form of Beer rather than what many believe was bread.

One of the oldest known legal "codes" was created to ensure the highest quality for beer. It is called the Hammurabi code and dates from 1730 BC.

This is long before the Germans wrote the German Purity Law of 1516. Again, a quality

milestone for brewers.

When Pasteur was investigating beer to understand the mysteries of fermentation, he also discovered bacteria, which opened the door to modern medicine.

The point here is that beer has an incredibly rich heritage and has impacted our modern lives much more than most people know.

We too at AB InBev have a rich heritage of incredible value, which we wholeheartedly protect.

Slide 15

Leffe 1240, Stella 1366, Bohemia 1852, Budweiser 1876, Brahma 1888, Corona 1925.

We also own the oldest beer in China- Harbin founded in 1900. The list is long.

Heritage (Slides 16)

Our portfolio includes eight of the top 10 most valuable beer brands in the world according to the 2018 BrandZ list (and we vigorously uphold the principles upon which our brands were developed.

Ingredients (Slides 17)

Most Beer is brewed from 3 ingredients: Water, Barley malt and Hops.

Yeast is added allowing for fermentation.

But that apparent simplicity hides a very complex science and process that allows for many styles, tastes and unique attributes:

The kilning and roasting of the **malt** gives us unlimited blending opportunities to deliver taste characteristics mostly unknown to other beverage categories:
from light crisp biscuit, bread crust, and caramel butterscotch, to toasted, black, bitter, chocolate or coffee!

In the brewing process, grains are not pressed like fruits.

It takes a lot of craftsmanship to convert grains into “Wort” in our brewhouses and it’s the complexity of our brewhouse that gives us the opportunity to brew a wide variety of flavors.

Hops are much more than most people think.

They provide not only bitterness and body to the beer, but also complex and interesting aroma.

We have more than 200 varieties, each with unique signatures.

Our Elk Mountain Farm in Idaho grows 10 commercial 60 experimental varieties.

Water makes up the largest part of Beer!

It’s quality has historically defined styles, Hard waters for darker beers, soft for pilsners, rich in sulfates for bitters, salty for the mouthwatering gose,...today we have the technology to purify the water to the exact balance to deliver the best beers.

Yeast’s availability to deliver unique flavor signatures is limitless.

From fruity banana found in Budweiser, melon in Hertog Jan, green apple in Beck’s, to smoky/Vanilla in Leffe, Clove in Franziskaner, and complex and sour character from wild yeast and bacteria, the options for unique and distinctive flavors never end.

The yeast strains from our historical brands have been in use for hundreds of years and are well-protected at our facilities.

We have a collection of more than 1200 proprietary yeasts secured in multiple safes, in different locations, under high security!

Fully fermented beer contains no sugar, is made of 90% brewing water, contains proteins mostly visible through the foam, vitamins produced by yeast, minerals, about 5% alcohol and about 1500 different aromatic components creating the unique flavor signature.

Ingredients (Slide 18)

We only select ingredients that meet our high quality and taste standards.

Adolphus Busch had a quote dating back to 1900 which is still relevant today, “First of all, comes the quality of our product.

We certainly have the best beer, and our principle to use nothing but the best material should therefore be lived up to...

Anyone who does not uphold our motto:
“Nothing is too good for the Anheuser-Busch beer” is not worthy of a commanding position
in our great establishment.”

As the industry leader, we monitor the world’s brewing material supply to ensure that we
have the quality and quantity needed.

We breed our own barley doing over 1,200 crosses per year and we grow our approved
varieties around the world and we do it for a good reason-to ensure the best quality.

It takes 7 years to develop a barley variety and the final approval is based on the quality
of the beer we can brew with it.

This same focus on quality applies to all our materials

Consumer Choice (Slide 19)

All these varieties of hops, barley malts and yeasts are combined and crafted to deliver
more than 100 styles of beer.

The growth of “craft and specialty” has pushed the envelope, exploring forgotten styles
and ingredients, connecting heritage and contemporary consumer needs.

Raw grains like wheat, oats, corn and rice provide unique flavor balance and take us back
1,000 years in time, when every part of the world was brewing beer with their local cereal:
Rice in China, Corn in Brazil, Oats in Summeria, Wheat in Babylonia, and Barley in Egypt.

We can deliver a broad level of strength: 0 to ~13% alcohol by volume.
We can brew from dry and low calorie to sweet and full.

We can do organic and
We have carbonation, keeping senses alert and quenching thirst.

We are honored to see adjacent categories trying to steal from the long brewing heritage,
trying to integrate beer attributes to their category, like Jameson Whiskey IPA, and Cold
brewed coffee on tap!

Consumer Choice (Slide 20)

We respect the consumer desire for choice...

If consumers want it, we will provide it.

This means developing and applying broad expertise in brewing and packaging and being
on top of competitive developments.

We monitor markets for new products and spend time in places where our consumers are. We know our competitor's beers and packages.

There's a beer for all needs and all occasions. Working with Marketing and Sales we make that choice clear and instinctive for the consumer. Providing accessible education to improve our category perception, appropriate packaging and glassware to match the positioning, occasion and brand truth, and simple navigation attributes to understand which beer is recommended for which occasion.

Transparency (Slide 21)

Beer is a wholesome product which makes it easy for us to be transparent.

It has few ingredients, and a natural process of brewing and fermentation.

We label our ingredients and we open our breweries.

People want to know and we will let them see the simplicity and honesty of our long-lasting process.

The expansion of craft and brewpubs created much more proximity between brewers and consumers leading to category education and trust.

Our Hertog Jan brewery in Arcen welcomes more visitors every year than it brews in hl.

Our Budweiser Experience center in St Louis hosts over half a million visitors annually and we are expanding our visitor centers in every zone.

Transparency (Slide 22)

Transparency is all about trust the consumer has in our brands.

This is why we bring visibility about our beer and ingredients to the consumer through platforms like Tap Into Your Beer and why we use social media to tell our stories.

Preservatives (Slide 23)

Consumers are asking for clean labels.

The 2 main preservatives found in alcoholic beverages are Vitamin C and Sulfites.

But as brew masters we have more natural options to retain freshness such as Improving our boiling process to reduce the thermal load on the beer, optimizing our fermentation to enable our yeast to create natural antioxidants, investing in our packaging lines to minimize oxygen exposure during filling and developing high tech solutions in our packaging materials like our Oxycrown, are the natural ways we deliver fresh beer to consumers.

Preservatives (Slide 24)

These efforts have also given us the opportunity to connect clean labels to our brand messaging to effect stronger brands.

Stakeholders (Slides 25)

Governments, Consumer Associations, and Institutions expect us to partner with them addressing their needs, concerns or general consumer trends.

And we have many initiatives going on:

We have been developing a portfolio answering the needs for organic or gluten free products.

In South Africa we are committed to make the country a net exporter of Hops by growing and improving the hop farming program in George.

Promoting the unique signature of South African Hops.

In Mozambique we have designed a technology to produce beer based on Cassava.

It stimulates the local economy, has side benefits on people's access to nutritive cultures and makes beer affordable and safer for consumption than home made spirits.

Our stakeholders expect us to maximize the valorization of our resources. We have developed a new beverage from our brewed grain. Turning a co-product into high value plant proteins.

Stakeholders (Slides 26)

As you can see, we value external stakeholder perspectives.

Stakeholders bring unique perspectives that can represent large groups of consumers.

We leverage these perspectives to deliver desirable consumer experience.

Quality & Freshness (Slides 27)

What does it take to brew the best beer in the world?

It starts with Heritage – Learning, and improving since our oldest roots, dating back to 1366

It takes People – Working with the most qualified people, highly-trained brewmasters from the best schools in the world with enormous passion, Scientists and Experts in hops, and grains, blending Art and Science into the craft of making beer.

It takes Ingredients – We are the largest maltsters in the world. Carefully selecting our ingredients. Working with growers.

We have our own hop farms and work with research institutes and professors to always improve our practices our verticalized operations set the standard for quality and allow us to deliver the best ingredients to our breweries.

And it's our role, as the leader of the industry to ensure that as a category, beer is known for being a product of the highest quality, ensuring that all brewers, Big and Small apply the highest quality standards.

We exercise 370 quality controls on every single batch, we have 267 panels across the globe, tasting beers every day.

We taste every single ingredient and every single batch at every step of the process, because it's our pride and commitment to ensure we produce the best and ensure its quality until the moment of consumption.

When consumers think of our company and our beers, high quality must be at the top of their minds and we work hard to make that happen.

Freshness (Slides 29)

Fresh Beer Tastes Better

I have already highlighted our efforts and innovations that allow us to have the freshest beers without adding antioxidant.

Our brewmasters are laser focused on freshness in each of our 260 breweries.

Transportation, warehousing and retailing all have a major impact and are intensely monitored.

The difference is remarkable which is why we are fanatical about protecting the freshness of our beers.

Sustainability (Slides 30)

There are about 1,000 barley grains in every pint of beer.

Our Fort Collins Research Center applies biological knowledge to make our grains of the future less demanding on water, energy, and naturally more resistant to the environment.

The same is true with our hop breeding programs.

We continuously improve our hop brewing practices to get the most of this precious resource, maximizing the recovery of fine Bitterness and Hop oils.

The growth of beer styles like IPA's which require a lot of hops, forced us to combine

efforts of all our brew masters to develop and share best practices.

Our World Class Efficiency program makes it easy to conserve our natural resources.

Other examples are our recently published, no-boil technology and the valorization of brewed grains Co-Product into a new style of beverage.

We preserve water. Our breweries have a very low water consumption ratio, and we raise the bar every year.

But we don't just look in our breweries, we optimize our entire supply chain and find ways to connect our efforts with our brands: Bud brewed with 100% renewable energy, Corona X Parley, and Stella Artois Water.Org

Sustainability (Slides 31)

How we impact our World is important to us, our consumers, and the sustainability of our business. We will continue to focus on practices that matter-agricultural practices, watershed, renewable energy, conservation, emissions, and recyclable materials, all to minimize our impact on the environment.

10 Brewing Principles (Slide 32)

These are our 10 brewing principles.

Our truth, our beliefs as Brewers, the principles we live by.

Our Commitment/Brewing Manifesto (Slide 33)

I'd like to close my presentation with our Commitment, our Brewing Manifesto.