Data Driven Decisions - SEE More From Seed to Cup

In the coffee business, we know sensory evaluation is key to our understanding and enjoyment of the brew. What's interesting is how disconnected that experience actually is.

Have you ever considered how much data actually exists in a cupping? Data that could enhance every aspect of our business, and usually gets filed somewhere - to be dealt with later. More and more, the quality of our lives, the vitality of our businesses, the effectiveness of our evaluations, and the wellbeing of our industry relies on our ability to find, examine, and make sense of information.

After all, who has time to go through it all?

As we held cuppings over the years, using the Specialty Coffee Association of America Coffee Cupping (SCAA) paper form, we would capture evaluations and produce reports. It was a tedious process.

Our biggest challenge? Making sense out of all we gathered was a complex process - talk about mind numbing...

We used paper, spreadsheets, an electronic cupping app along with another windows app. The data was passing through 4 disconnected systems, resulting in 40+ hours to manage the tech involved - and glean that data (if you're wondering what data and why it might be useful, I'll tell you in a moment - it's an eye opener!)

With so many disconnected moving parts in our evaluation process, human error became an issue - from data entry to checking with cuppers to confirm their results. And, to use our system, everyone needed an active internet connection... Lots to manage and frankly, the technology detracted from the overall experience, instead of enhancing it. Good software fades into the background when you use it, allowing you to see what you need to see and do what you must without distraction. Like any good tool, it makes the job easier, not more complex.

An idea began percolating...

What if we had a simpler way to collect all the data, deliver valuable insights, compare historical data and at the same time create some uniformity in the process?

After all, the information we gather on traditional paper cupping forms is almost useless for spotting patterns. We find ourselves buried in data, not because there's too much, but because we haven't learned how to weave it into something meaningful.

We were also struck by the lack of historical data. It seemed wasteful in an age when most of us are walking around with a computer in our pocket (smart phones, tablets) and it should be so easy - even standard.

Why Cupping Data Anyway?

As a business person trying to get the job done, your only concern when dealing with data is:

"What does it mean?"

so you can move on the whole point of the matter, which is to decide

"What should I do about it?"

That is it.

For the farmers, data that can help them better understand the quality of their coffees, from one growing season to another. They can develop profiles to help them validate new farming practices and initiatives.

Roasters can gather and easily access historical data, including the favorite and preferred flavor profiles of any group. They'd be able to compare various roasts, improve their QA/QC process and not only gain insight on their roasting techniques, but validate hunches and achieve more consistent profiles.

And frankly, if you don't validate your roasting efforts with cupping, you're missing the mark. Don't leave it up to your consumers to let you know - that can be painful in your bottom line.

You're better off to know what buyers want, (and give it to them, consistently!) as well as what they don't care for, saving time, and in some cases, expense.

Roasters could even make purchase recommendations based on past experiences and what retailers, particularly customers liked, streamlining the entire process.

Consider too, that retail cupping is often done using "professional cupping language." What would it be like to let consumers describe in their preferences, in language that was meaningful to them? You could build a lexicon in your consumer's voice with the added advantage of developing deep insight into what your consumers want, and value.

Cupping instructors can easily look at student's combined cupping, identify insights, patterns and commonalities that can enrich discussions and learning.

If the cupping evaluation is streamlined and standardized and can be adapted to your particular interests or needs, it becomes an invaluable tool for doing better work, creating a better experience and enhancing the entire process.

I digress a little, but imagine being able to say to X, back in 2015, you bought a container of Y and blended it with Z and your customers were crazy for the blend. Well, I've got access to A and B, which is .75 cents less a pound, and mimics that profile almost exactly. Are you interested?

Sounds sophisticated. Well, it is. And, it isn't. Because good technology should be easy to use and deliver a variety of meaningful information the way YOU prefer to SEE it and consume it.

The Ultimate Goal? A Great Cuppa. But First...

Our highly evolved brain is unique in its ability to reason abstractly, (which is required to analyze data), nevertheless, it has its limitations, and despite common wisdom, we are NOT wired to multi-task.

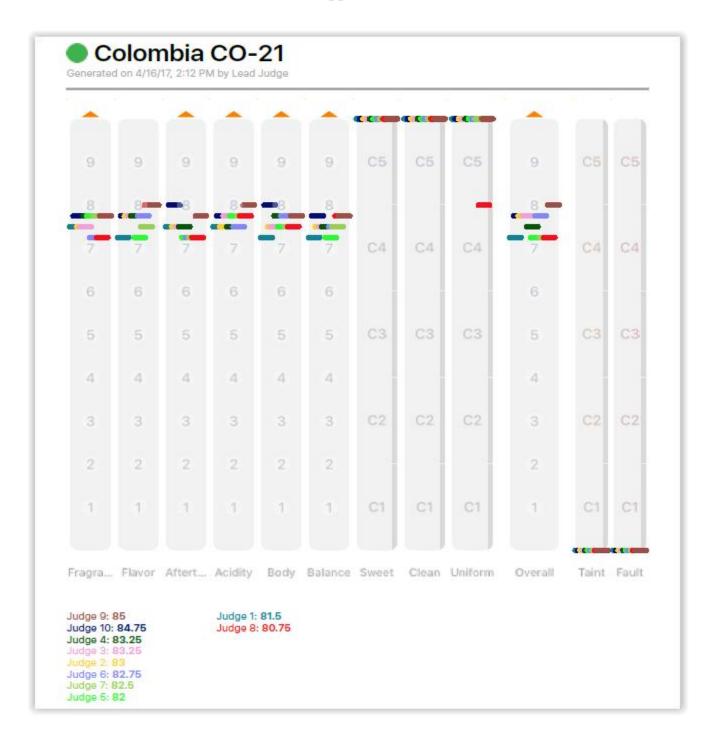
Our ability to analyze data, involves short-term memory (a.k.a. working memory). Only four "chunks" of information can be held in short-term memory, Only Four Chunks! If all four slots are filled, you have to let something go to bring in something new. And that chunk you let go, well, only two possibilities, memorize it before it leaves, or simply forget it. And, you already know how that turns out (!).

Vision is our dominant sense, so, seeing and thinking are intimately connected. No accident that we use expressions such as "I see" to describe the experience of understanding. These visual metaphors; insight, illumination, and enlightenment are intimately connected to understanding. Of all the sense receptors in the human body, 70% are located in our eyes.

I know, you're probably thinking what in the world does this have to do with coffee?

Remember those 4 chunks of information?

Take a look at this Visual Chart of 10 cuppers' evaluation:



Here are a few facts quickly and clearly visible in this Chart:

- There were no issues with Sweetness & Clean Cup, but Judge 8 found Cup 5 Not Uniform
- ✓ There were no Taints or Faults
- ✓ Flavor, Aftertaste & Body differed the most among the 10 cuppers
- ✓ As the coffee cooled it improved among several attributes
- ✓ The final score range among cuppers differed by 4.25 points

The insights that are sought through sensory evaluation are not products of technology; they are products of the human brain. Software doesn't think—people do.

It ties into our desire to make use of our powerful visual sense, so it's easier to SEE the sensory data we just collected!

We tested some digital apps and found them lacking. Getting digital downloads of "just data" isn't all that helpful. You need to see instant and meaningful visual information. It's how your mind best processes and makes sense of what the data is waiting to reveal.

It's almost like walking into a dark room, feeling your way around, when suddenly someone flips the light switch you didn't know was there. Gathering data is one thing, making meaningful use of it, where shadows turn into light, is the space we all want to be in. And, unless it's easy to understand, it doesn't get used - no matter how good the intentions. And before you try to pop that data into a spreadsheet and graph it, be cautious, your intention to give meaningful signals can easily turn into noise.

We've taken all this into consideration to create technology that gives your business a distinct advantage. It augments what people do well, like detecting patterns, making connections, and recognizing implications, in short, makes life easier....

Meet OpenCup Your Cupping Game Changer

After years of struggling with this process, and being ambitious sorts who come from a tech background, we decided to create an app that was visual, user friendly, worked with any learning style and gave you multiple ways to look at the info you gathered without needing a degree in information technology!

OpenCup - our brainchild - is all about simplicity that helps you SEE insights. Instead of multiple steps and a steep learning curve, you get three easy, intuitive steps with the end result of incredibly useful information - at your fingertips.

Why OpenCup?

Paper evaluation forms are familiar, and work well to record your impressions in the moment, but it's not all that practical when trying to answer "What does it mean?".

The World Coffee Research organization is in the process of researching the ways we can improve the "seed to cup" experience. Their mission is improving the quality and sustainability of specialty coffee.

Their research is data driven and their work is changing the conversation from the traditional focus of coffee cupping from a market-facing, descriptive process to a farm-facing, prescriptive process. Open Cup is architected to support data driven initiatives, like these, it's why we spent months identifying & modeling this flow of data, then built the engine to run it, so you don't have to do any heavy lifting.

Since 2007, we've been volunteering with the Rainforest Alliance to help deliver the data that helps producers improve their farming practices, resulting in better quality coffee.

Now, as we gather data, we are able to help producers understand why their coffee was a

great crop or missed the mark. Information leads to consistency. Consistency delivers efficiency. Efficiency saves money and time.

It sounds like a neat tool, but what does it actually do for us?

Glad you asked. It might be hard to envision new technology applied to a process that's been around so long. And, you may be tempted to think "it ain't broke, so why fix it..." We agree, paper forms work really well - IN THE MOMENT and as you tally the scores, you have some simple answers.

By comparison...

We used OpenCup recently at a class practicing sensory cuppings. After the cupping we combined everyone's results and projected them onto a big flat screen. The instructor could see - immediately - who was not calibrated or picking up certain sensory information. That allowed him to refine his teaching to concentrate on those particular areas - the ones most useful to the students.

He was able to customize his teaching and show students where and how they could sense what they seemed to be missing. No longer hit or miss, or hoping everyone understood and was speaking the same language, they had visual confirmation of what could instantly be focused on, and improved.

One Open Cup tester described it this way:

"Open Cup was a manageable way to move in a semi-linear fashion (without being restricted and unable to double back) through a cupping score sheet, which I generally find to be a little too much information all at once the way it presents in paper form. It made the scoring process as a whole more approachable for me." And, that's just the tip of iceberg. Here are some other ways you can use Open Cup:

Team Collaboration- Send cuppings to - and receive results from other cuppers. Merge results into a common view for analysis, discussion, decision making and reporting. The information you can extract will blow you away. You'll wonder how you ever managed without it (or why!) It's like getting glasses for the first time, everything snaps into focus - you'd never go back.

Cup Your Way - Easily customize any evaluation form and set the cupping protocol to your liking, all without any programming or tech know-how. You can decide what's most important to you, and set your cuppings accordingly. Once you see this in action, it will become indispensable.

Automatic Trending

Series Creation with different data visualization views

Weighted scoring per attribute

Negative to Positive scoring scale per attribute

And much, much, more...,

Create your own lexicon You won't have to wonder anymore if what Barbara notes as "lemon", is the same as Bill's "Meyers lemon" description? Or Brandon's "Citrus notes". Categorizing your lexicon makes it easier to use, and understand. You remove the guesswork from a sensory experience by comparing "lemons to lemons..."

Create Greens, Samples, Roasts, Blends for evaluation You'll be able to easily, yet scientifically test, repeat and adjust based on information you can instantly see and compare in a variety of ways. You're already collecting this data, now you can make it work for you in new ways that will not only create insights and uniformity, but impact

your bottom line as well.

Use predetermined Industry Forms/Protocols or make your own

We've built a library of standardized protocols. However, adjusting those or customizing your own is ridiculously simple (dare we say, even fun?).

Several ways to share results:

Customize reports with your company logo and contact info

You'll have sophisticated reporting that's custom to you. If you ever wanted to be an industry leader - if you've ever wanted to be able to gain more benefit from the work you do, this makes it easy.

User management made simple

You don't have to take in a big learning curve, or spend a lot of time adapting our app to your needs. If you want to add more people to the app so they can participate in a cupping, or access other data? Push button simple.

Cup in remote locations

Our Bluetooth Network Protocol seamlessly takes over when internet connectivity is not available. Nothing worse than having everyone assembled and ready, only to be frustrated by no internet connection. We accounted for that and overcame it, so you'd never have to.

We're constantly improving our app, based on our own extensive use and testing and the feedback we get from our clients. In the coming months, you'll see:

- Green Grading
- Profile Cupping
- Blend Formulator

- Data Dashboards
- Advanced Auditing- As you collect data (think insights)
- Automatic integration with Roastmaster Roast Profiling Software
- Multiple Language Support

The richness and speed of visual perception is a gift we cannot afford to ignore if you hope to understand more than the most obvious facts that live in your data.

Seeing is Knowing – <u>Let Me See</u>