Elements of the Perfect Cup

Day explains, in order of importance, the elements of optimal coffee.

The perfect ground.
Particle size is "incredibly important," says Day.

"Assuming you have fresh coffee and good water, the most important thing is getting the particle size of the grind exactly right." The process can be difficult, because the "right size" will vary according to preparation method. That's a major reason why Perfect Coffee was preground. This summer, Blue Bottle plans to unveil Blue Bottle Perfectly Ground Coffee.



surprisingly, the basic ingredients—coffee beans and water—are key. But that's just the beginning, according to Day.



determine the optimal ratio?
As in the case of step 2, through persistent experimentation, with results recorded and analyzed with an approach "similar to what we use in very sophisticated statistical or economic analyses," he says. "It's modern big data science applied to coffee, basically."



Brewing time.
While brewing time
is a basic element, Day
notes that "the way that
the coffee interacts with the water is
less than 50 percent of the problem"
of making perfect coffee.

Temperature and pressure. While temperature and pressure are basic elements, they are the least important. What does this mean if you're considering the purchase of a fancy home brewing system? You may get less value for your money than you think, according to Day. "You can use our packets in a \$20 Mr. Coffee and it will taste way better" than coffee that's improperly ground and measured, he says.

-Karen McCally '02 (PhD)

Big Data Coffee

A generation ago, the Seattle roaster Starbucks remade the American coffee-drinking experience, grinding beans right before the eyes of café customers and producing from this raw material a startling array of coffee drinks. According to **Neil Day** '90, Starbucks ushered in the "second wave" of coffee culture in America. But today, he says, the now ubiquitous chain is two waves behind.

Day is a Silicon Valley technologist and the founder of Perfect Coffee, an artisanal coffee company that achieved something coffee connoisseurs recently thought impossible: making preground, single-serve coffee packets that produced coffee rivaling in quality the best freshly ground varieties. If artisanal coffee—farm-totable, hand-roasted, and made in partnership with highly vetted growers—was the third wave, artisanal coffee that is easy to prepare at home is the fourth, says Day.

"It was a very analog thing in a very digital life," he says of the first artisanal coffee he tasted in Portland, Oregon, in the early days of the third wave. Coffee soon became, he says, "a very serious hobby."

Day started his career at Apple, and in 1999 founded one of the first e-commerce sites, HomeWarehouse.com, which was later purchased by Walmart. He went on to serve as the chief technology officer of Sears, then Shutterfly.

He observed the way in which technology was transforming everyday life, but had made little impact on coffee. The best quality coffee was fussy and complicated to prepare, and available only in select cafes with experienced baristas and long lines of customers. The goal of Perfect Coffee "was really just, at the end of the day, figuring out how to apply analytic and scientific tools to making fantastic coffee really accessible to people," he says.

Day ran subscription-based Perfect Coffee for just two years before third-wave stalwart Blue Bottle Coffee bought it in the spring of 2015. Day is now Blue Bottle's principal of coffee technologies.

So how did Day achieve the perfect preground cup? First, by identifying the key components of optimal coffee, and second, by delivering the most important of those components in each single packet.

But while he's stressed convenience and accessibility in his business, Day continues to brew coffee from scratch at home. "I totally admit that I'm kind of ridiculous," he says. "I make espresso pretty much every morning, and I may actually make two or three cups on the way to the one cup that I actually drink."

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-KAREN MCCALLY '02 (PHD)