

# It's Time to Kill the Keurig

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## Introduction

The process of getting a coffee bean from the plant to your mug is incredible. Expert growers spend their entire lives painstakingly cultivating their farms and creating relationships with distributors. Master roasters spend years practicing and alternating between degrees down to the decimal point to find the perfect temperature for their single origin and blended roasts. Baristas train and compete, taking great care and putting incredible effort into each and every cup that crosses their portafilters and pour-over cones. I have a huge amount of respect for the individuals that take part in this process daily.

The more I learn about the method and skill necessary to create high quality coffee, the deeper my resentment towards Keurig gets.

This short diatribe is primarily meant to be informational - as backwards as that sounds. As I've talked to people about Keurig, I've found that many folks like their coffee and the variety of options that they make available, but don't know much about their coffee or what differentiates their machines from traditional brew methods. If that's you, I beg you to read on. If you're like me and dislike Keurig already, you'll probably find yourself nodding along with my conclusions - I ask you to share this with your friends that fit into the first camp.

This essay contains three short chapters, and trust me when I say that each only scratches the surface of their respective topics. We'll begin with history, then discuss math and money, and finally talk about the environment. I encourage you to do your own research on these topics as well.

In the sage words of Khan in the newest Star Trek film - "Now, shall we begin?"

# Chapter 1: A Short History of Keurig

To understand the makeup of Keurig as a company it is helpful to have some context. This is by no means an exhaustive history, but I think you'll find it interesting and informative all the same. It will help expose the main thread that ties the company together and *\*spoiler alert\** it's not coffee.

The early days of Keurig read like a mixture of *The Social Network* mixed with the first 30 minutes of *Fight Club*. It was the mid 1980s and John Sylvan, employed in a low-level marketing job, found himself drinking a lot of bad coffee. After consuming one too many cups of this burned bastardization that had been simmering in a traditional pot for hours, he had a eureka moment. He quit his job in the early 90s after experimenting with a new idea: single-servings of coffee brewed to perfection.

Partnering with his old roommates from Colby College, Sylvan slowly began overcoming the many hurdles associated with brewing a great cup o' joe. A big one was creating a machine that could pump out enough pressure to properly brew the coffee. Another was crafting a cup that would seal and help keep the grounds fresh. This was a DIY project to the max: Jello-O shot containers provided the first primitive K-cup housing. They were sealed using a clothing iron and liable to burst with any significant change in pressure. Sylvan and his partner Peter Dragone found this out the hard way when a batch exploded while in their luggage on a flight to present their project to potential investors. The entrepreneurs had to stay up all night hand-crafting new K-Cups in their hotel room.

The coffee boom was beginning, and many people were trying to cash in while big names like Starbucks rose to prominence. In today's coffee community some people refer to this as the "second wave." At the time, coffee was a \$40 billion industry. Capturing even a sliver of that would mean monstrous success. But as Sylvan and Dragone quickly found out, this was easier said than done.

After suffering financial troubles, then finally receiving a lifeline of money from an investor, Peter Dragone began having personal problems with where the company was going. He was forced out in 1997, and John Sylvan left on more peaceful terms a few months later. If this was a movie, we could cue the credits.

But obviously Keurig's days of huge financial success had yet to be realized.

Between the years of 1998 and 2002 Keurig did two huge things: they offered great customer service and slowly created a more reliable product. Their machines, primarily targeted towards offices at this point, were pretty unstable. But as office workers became addicted to how easy it was to brew coffee in a Keurig, the idea got more traction. If a machine broke, office workers would beg to get it fixed, and Keurig happily obliged. In 2002 Keurig sold 10,000 units, and in 2004 they started focusing in on a new market: home brewing.

Black Friday of 2004 was a big success for the company; their priciest machines were outselling competitors at an astonishing rate - and coffee companies were taking notice. Green Mountain had been providing coffee to Keurig for some time, but by 2006 they were confident enough in Keurig's success to buy out the company completely.

By the time the 2010 fiscal year rolled around, Keurig was a commonplace name in homes and offices alike. Sales of K-cups and the machines that brew them generated \$1.2 billion for Green Mountain - 88% of the company's revenues. If this was the sequel to the first movie, we could fade to black.

However, 2012 brought a new challenge to the renamed Keurig Green Mountain. This was the year that their original two K-cup patents, which have John Sylvan and Peter Dragone's names on them, expired. Many third-party competitors had been waiting for this moment; it allowed them to create non-Keurig branded cups that are compatible with the massive infrastructure of brewers sitting in people's homes and offices. This would cost Keurig Green Mountain precious market share that they had fought tooth-and-nail to carve out over the past two decades - and they were not about to let that happen.

Their first attempt at combating this problem was to create a new type of brew system and pod. The Keurig brand resonates as a high-quality company with many consumers, and they were banking on this to carry them to the next level. But it didn't work - largely because consumers had no interest in buying the new "Vue" systems when their old Keurig machine was working just fine. In turn, Keurig hatched a new plan to keep their product safe.

Keurig 2.0 saw its debut in mid-2014 and received a splattering of negative press immediately. It's a brilliant concept, really. Keurig 2.0 launched with a line of new brewers that looks very similar to the old machines, albeit with some techy upgrades like touchscreens and pulsing LEDs. They are pitched as the next step in K-cup customization. Each pod comes equipped with a bar code-esque ring around the top that the machine's software reads. It uses this information to set the brew temperature, time, and pressure to make the best optimized cup for that type of coffee. Great, right? The problem is that this bar code also functions as a type of DRM (digital rights management, which is usually associated with online media to prevent piracy). Old K-cups don't work in the new brewers. Third party K-cups don't work in the new brewers. Only Keurig 2.0 K-cups work, and that's how Keurig Green Mountain is overcoming their patent problem. Part three: credits roll.

Consumers are voicing their opinions about Keurig 2.0, to some extent. As of this writing, the Keurig 20231 K450 2.0 Brewer on Amazon, the cheapest 2.0 option, has an average rating of 2 stars with 41 reviews. But as the holiday season rolls around, is that going to have much pull against the addicting ease-of-use factor that has carried Keurig so far?

At the risk of sounding overly dramatic, you could compare the story of Keurig to that of Frankenstein's Monster. John Sylvan and Peter Dragone painstakingly pieced together the first iteration of K-cups and brewing equipment in hopes of brewing better coffee than the office pots they loved to hate. But at some point, the monster turned on them. It has grown into one of the most successful coffee companies in the world, carving away market share year by year. The problem is that delivering a great coffee product hasn't been on the minds of Keurig executives for decades, and the consumer suffers because of this - whether they know it or not. Money is the electricity that brought Keurig's Frankenstein to life, and it can only be killed by consumers refusing to dump more money into this beast.

In the next chapter, I want to talk about math. Specifically, how much a consumer who decides to purchase a Keurig will spend in a year. Feel free to follow along with a pen and paper - you may need it.

## Chapter 2: The Math

When it comes to calculating the cost of coffee, it's not as straightforward as you might think. There are a few metrics that people generally judge coffee by, but not all of them are created equal. One of these metrics, perhaps the most common, is the price per cup of coffee. This metric is good, but not great. After all, the 5oz cups typically used in caffeine studies qualifies as a "cup" to some people, while the 16oz Grande size at Starbucks, with double or triple the amount of caffeine as a 5oz brew, qualifies as a "cup" to others. So while this metric will tell you how much money is coming out of your wallet to buy coffee over a given period of time, it says nothing about the contents of that coffee or the quality.

Other methods of calculating the cost of coffee consider the price per gram and price per pound, which are vastly more accurate metrics. Just keep in mind that it's important to treat unbrewed coffee and brewed coffee as completely separate entities. Mixing apples and oranges can make you come up with some pretty wonky prices. In a dramatic effort to illustrate my point, I will tackle both the price/cup over the course of a year and the price/pound.

One last note before I lead you into the weeds. Keurig is a little tricky when it comes to calculating price due to their individually wrapped pods. They aren't upfront about how much coffee goes into each pod, but if you cut one open around 10 grams will spill out. As you'll see in a moment, there's a big problem with this number. Just realize that it is no accident that Keurig doesn't widely publish how much coffee you are getting per dollar spent.

According to national coffee drinking trends published by the National Coffee Association in 2010, the average American drinks 3.1, 9oz cups of coffee per day. That comes out to 1,132 cups per year. A package of the new K-carafe cups, put out by Keurig earlier this year in conjunction with Keurig 2.0, contain 8 packs. Each pack brews about 4 cups of coffee, which means in one year you'll need to buy 36 packages to sate your coffee craving. At \$15/package, this comes out to \$540/year.

But most people don't buy the new K-carafe packages, and chances are good that you won't drink 3 cups in one sitting even if you own one of the new 2.0 compatible machines. You might have a cup of coffee in the morning, and then a couple more at work. So let's be a bit more realistic and take a look at what made Keurig famous in the first place: their single-serving K-cups.

A standard package of K-cups contain 24 individual servings and runs for around \$18. Using the same statistics as before, 1,132 cups, this means you'll need to purchase 48 packages over the course of a year. This comes out to \$864/year.

To compare, we're going to use one of the biggest names in specialty coffee: Intelligentsia. You won't find their beans in a super market, but there's a good chance that a local coffee shop near you brews their high quality product. Their House Blend goes for \$14 for one 12oz bag of coffee. Because we're talking about home brewing, it's more useful to discuss unbrewed coffee in terms of grams rather than ounces. One 12oz bag converts to 340.19 grams/package of beans. One common method of brewing at home is with the Aeropress - a cheap, hassle-free device that, in my opinion, makes excellent coffee. Stumptown, another big name in specialty coffee, recommends using 17 grams of ground coffee in their inverted Aeropress brew method which produces about 9oz of brewed coffee. 340.19 grams per package divided by 17 grams per cup comes out to just over 20 cups/package in Intelligentsia's House Blend.

Now we go back to our original statistics and divide it out. 1,132 cups per year/20 cups per package comes out to 57 packages over the course of a year of brewing. 57 packages multiplied by \$14 is \$798/year for some of the highest quality coffee on the market.

At first you might be thinking “whoa, doesn’t that make K-cups competitive against specialty coffee?” Well, let’s go a level deeper. As it is, you’ll be saving \$66 a year when you give up the K-cup and drink Intelligentsia. But Keurig uses a clever trick to bring the price of their coffee down artificially: they use far less than the recommended weight of coffee to brew. Essentially, they purposefully make you brew weaker coffee. As you may have noticed, K-cups use 10 grams/9oz cup, while Stumptown recommends closer to 20. We’re going to stick with 17 grams, which will give us a direct comparison to our Intelligentsia number.

Please note that the following numbers only give us a more realistic price/pound. This isn’t the actual amount that you’ll be paying out of pocket, but it does represent how much money you would be paying if Keurig decided to use a proper coffee-to-water ratio. It essentially represents the amount of money you would be willing to pay Keurig if they decided to start making half-honest coffee.

Instead of using the 10 grams of coffee that Keurig currently puts in their K-cups, let’s up that number to the recommended 17 grams. Right now, Keurig provides 24 K-cups per package, with 10 grams of coffee per pod. If they wanted to keep their profit margin the same, Keurig would need to change how many K-cups they include in one pack. If we use their current ratio, 17 grams of coffee per pod would mean that Keurig would only include a little over 14 K-cups per package. We’ll keep this an even 14 for the sake of math.

Again, we’re assuming that Keurig keeps their 240 grams of coffee per box, but decides to use 14, 17 gram coffee pods instead of 24, 10 gram coffee pods. The big change is that now you’ll need to buy significantly more packages of K-cups over the course of a year to meet our 1,132 cups. In fact, you would need to purchase 81 packages of K-cups total. This comes out to \$1,458/year.

Did you get that? Now we’re talking a realistic savings of \$660 every year.

The third and final way that we will compare K-cups and specialty coffee is the price per pound of coffee contained in each package. This math is a bit less involved, so we’ll bring the new K-carafe pods back into the conversation.

As I mentioned before, there are 8 K-carafe pods per pack, and each pod can pump out up to 4 cups of coffee. That means that there are about 40 grams of coffee per K-carafe pod, or 320 grams of coffee in each pack. We convert grams to pounds, and this gives us 0.71 pounds selling for \$15, or about \$21.12/lb.

Let’s do the same thing for K-cups: 10 grams of coffee per pod, and 24 pods in a pack; a total of 240 grams of coffee per pack. 240 grams converts to 0.53lbs which sells for \$18. That means about \$33.96/lb.

And finally, Intelligentsia: 12oz of coffee per bag converts to 0.75lbs that sells for \$14. That means about \$18.66/lb.

To you K-cup enthusiasts out there: I get it. You may be fine with the way Keurig coffee tastes, and that actual \$66 of savings yearly may not be enough to get you over the hump of simplicity that Keurig provides in your day-to-day life. When we’re talking about prices, there’s certainly more than dollars and cents at stake. Opportunity cost is a huge factor, and you may be fine with coughing up the extra dough for weaker coffee that’s there simply to get you through the day.

Consider this, though: the same argument can be made about fast food. Nobody eats fast food because it’s a Nutritious Part of their Breakfast™. We eat fast food because it’s convenient, or because we don’t have enough food to make dinner, or because we slept through our alarm, or

because of hundreds of other reasons. But nobody is going to compare a Big Mac to a home cooked burger covered in melted pepper jack cheese, grilled onions, fresh lettuce, and tomato on a homemade brioche bun. Defending your love of Keurig in this morning ritual argument is tantamount to saying that you'll take McDonalds over a home cooked meal every single day. And at a higher price point.

In the next chapter I want to depart from raw money and talk about something that I believe is very important - sustainability and the environment.

## Chapter 3: The Environment

Back in 2010 - around the time that Green Mountain was experiencing their first wave of immense success due to the ubiquitous K-cup - the New York Times ran an article titled "A Coffee Conundrum." The article deals with how, at the time, K-cups and other single-brew coffee pods were not recyclable or reusable. Here's a quote from that article:

"More than 80 percent of Green Mountain's \$803 million in sales last year came from nonrecyclable, nonbiodegradable, single-use coffee pods and their brewing systems. This year, the company expects to sell nearly three billion K-Cups, the plastic and tinfoil pods that are made to be thrown away — filter, grounds and all — after one use."

Back then K-cup enthusiasts could do their part by purchasing a product put out by Keurig themselves. The "My K-Cup" reusable coffee filter was a little basket that you could pack with your own grounds, then brew in your favorite Keurig machine. It actually may be the best thing Keurig has invented yet - and at \$20 per basket they were certainly capitalizing on that.

Now, here we are 4 years later. What is Keurig doing today about their sustainability efforts? Here's a quote from their website in the FAQ section:

"The challenge of protecting the freshness of roasted coffee while using environmentally friendly packaging is one that both Keurig and the coffee industry are committed to overcoming. We are very sensitive about the waste created by the K-Cup® packs and are investigating alternative materials. Finding a solution for this is a priority for us, and one we hope to have before long."

So...nothing. And actually, it's gotten worse. The DRM that debuted with Keurig 2.0 systems won't allow old K-cups to be brewed. Sadly, the My K-Cup reusable filters don't work either. In fact, people have had to come up with a way to hack the new machines to accept the incompatible pods that they inadvertently purchased. I repeat: people are hacking their coffee machines.

The short and the long of it is that Keurig is sitting on a fat mound of money that continues pouring in because people simply don't care enough about the environment to stop purchasing the product. Ease-of-use has become the golden calf that many folks worship in their morning coffee ritual, and it has allowed Keurig to monopolize their version of single use coffee pods beyond the point of sanity.

# Conclusion: What You Can Do

As we speak, millions of Americans are reading their wallets to buy Christmas presents on Black Friday. This, I think, is the first opportunity for response. I'd like to make a dent in Keurig sales this holiday season, and I think that's possible in two ways. First, #KillTheKCup. At the risk of going all Kony 2012 on you, I do think social media is one way we can spread this information quickly. I'm offering this essay on my blog as a PDF so that you can Tweet it, post it to Facebook, or put it on your own blog. But if you're like me, you know that social media is nothing without personal relationships.

The second, and the most important way that you can make a positive impact on the massive Keurig problem is by discussing this information with your friends and family. And if you're looking for a gift this Christmas, I've included a short list of alternative coffee brewing techniques and equipment that are way cheaper than Keurig machines. As you already know, you'll save a ton of money in the long run. In regards to coffee, I'm a huge believer in the local coffee shop. If you don't know much about coffee, ask. Any good barista will be excited to help you on your way. If you don't have a quality coffee shop or roaster near you, feel free to purchase beans from Intelligentsia, Stumptown, Ritual, or the hundreds of other specialty coffee shops around the U.S. You might even be interested in a subscription service like Tonx.

To sign off, I'd like to quote Bill and Ted, two visionaries that have had a profound impact on me over the years. "Let's reach out and touch someone."

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## Brewing Equipment

These are all products I use or have some degree of experience with. I can recommend them all, though there are many other great alternatives. Click the name to view the product on Amazon.

### Brewers

- [Aeropress](#) (\$25.95)
- [Hario v60](#) (\$16.40) - [filters](#)
- [Clever Coffee Dripper](#) (\$22.00) - [filters](#)
- [Kalita Wave](#) (\$33.89) - [filters](#)

### Kettles

- [Electric Kettle](#) (\$21.69)
- [Hario Goosneck Kettle](#) (\$39.37)

### Grinders

- [Hario Mini Mill Burr Grinder](#) (\$24.40)
- [Baratza Encore Burr Grinder](#) (\$129.00)

Notes from the author:

All Keurig numbers are based on Donut Shop K-cups. In my research, these were some of the highest rated K-cups and I believe they well represent what is currently on the market.

My historical research was primarily based on these articles:

- [http://www.boston.com/business/articles/2011/08/07/the inside story of keurigs rise to a billion dollar coffee empire/?page=full](http://www.boston.com/business/articles/2011/08/07/the_inside_story_of_keurigs_rise_to_a_billion_dollar_coffee_empire/?page=full)
- [http://www.nytimes.com/2010/08/04/business/energy-environment/04coffee.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2010/08/04/business/energy-environment/04coffee.html?pagewanted=all&_r=0)
- <http://www.nytimes.com/2012/02/08/dining/single-serve-coffee-brewers-make-convenience-costly.html>

Questions, comments, or concerns? Contact me here:

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