

An Equity Note

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What's Inside:

- Christensen's "Jobs To Be Done" Framework
- How To Identify Profitable Mousetraps
- What makes one mouse trap better than another?

Companies Mentioned:

- McDonald's (MCD)

Equity Note: Christensen, Emerson, and Thiel Walk Into A Bar ...

"Build a better mousetrap, and the world will beat a path to your door." - Ralph Waldo Emerson

The Holy Grail of investing is to identify and buy the best (or exponentially better) mouse traps at the best possible prices.

Mousetraps come in many flavors. Some help you find new clothes. Others allow you to sell your car without leaving the couch. Regardless of *what* the mousetrap will enable you to accomplish, they all share one common thread:

The best mousetraps allow consumers to do things they already do, but at 10x the efficiency and enjoyment.

This begs the question: *What makes a good mousetrap, and how can we identify them?*

The answer lies in Clayton Christensen's famous ["Jobs To Be Done"](#) theory.

Customers unconsciously choose certain mouse traps because it allows them to *complete a job* better than other competitors. These companies do better jobs by helping customers solve pain points faster/better/cheaper than any alternative.

We'll call this Emerson's Milkshake Theory (EMT). Don't worry, "milkshake" will make sense later.

Additionally, Christensen's big idea is that jobs, *not customers*, are the proper unit of analysis when analyzing mouse traps (read: businesses).

These principles flip the script on how most investors analyze companies, beginning with quantitative or financial metrics. Instead, it forces us to walk a mile in a customer's shoes. To see how they *really* think about a company's product or service.

We ask three fundamental questions:

- **What is the job to be done?**
- **What are the experiences in purchasing, using, and living with the product we need to provide to get the job done?**
- **What and how must we integrate to create the best mousetrap?**

After we *fully understand* why customers choose certain products to complete jobs, we should shift to financial metrics.

The end result is a better investment analysis process, a clearer understanding of a company's competitive positioning, and more efficient use of resources (time, energy, and money).

Here's the kicker: that's only half the equation. Investors who focus on finding the best mouse traps – without respecting price or business models – eventually invest in cash-burning businesses with shitty unit economics and no path to long-term durability.

Successful long-term investing combines business analysis with security analysis. In other words, buying the *best* businesses at the *best* prices.

Luckily, Peter Thiel offers an excellent lens for discerning good versus poor business models in mousetrap companies.

If I did my job correctly, you would have learned three things by the end of this *Note*:

- **Christensen's "Jobs To Be Done" Framework**
- **How to find mouse traps with profitable long-term business models**
- **How to tell if one mousetrap is better than another**

Let's get after it.

Sell Me This Milkshake

Suppose you were hired to help McDonald's sell more milkshakes.

What would you do? You'd probably survey loads of milkshake aficionados, document what they want in a milkshake, and change the recipe to meet those requirements.

Sounds like a great plan, right?

Wrong.

McDonald's needed to answer only one question to sell more milkshakes: **What job arises in people's lives that causes them to come to McDonald's to "hire" a milkshake?**

McDonald's cuts through detailed surveys to reach the heart of a customer's purchase decision by asking this question.

The customer response was surprisingly obvious (emphasis mine):

“They had a long and boring drive to work, and needed something to make the commute interesting. They weren’t really hungry yet, but knew that by midmorning their stomach would be grumbling. And they faced constraints: they were in a hurry, dressed for work, and had only one free hand.”

McDonald’s now knows *why* customers buy milkshakes and the *actual* range of competitors in the space. Back to Christensen’s piece (emphasis mine):

“It turned out that there was plenty of competition for this job, but nothing else did the job perfectly. “I hire bananas sometimes. But take my word for it: don’t do bananas,” one customer cautioned. “They’re gone too quickly, and you’ll be hungry again by midmorning.” Doughnuts were too crumbly and made for sticky steering wheels. Bagels were often dry and tasteless, prompting people to drive with their knees while trying to slather on jam or cream cheese.”

A milkshake is filling, takes ~20 minutes to consume, requires only one hand, and fits perfectly into a cup holder. In other words, milkshakes were the **best mousetrap** for the job to be done (daily commute snack) ... a true *Emerson Milkshake*.

Our job as investors is to find Emerson Milkshake businesses. We do this by walking a mile in a customer’s shoes while asking three core questions:

- **What is the job to be done?**
- **What are the experiences in purchasing, using, and living with the product we need to provide to get the job done?**
- **What and how must we integrate to create the best mousetrap?**

These three questions cut straight to the heart of what *really* matters when analyzing business: **Why do companies hire one product or service versus another?**

However, we’re still left with **“Can this hired product or service extract enough profits from its customers to create long-term value?”**

We’ll let Peter Thiel tap in here.

It’s Not Enough To Create The Best Mousetrap

It doesn’t matter if it’s a milkshake, B2B software, or a railroad. (Spoiler!) Mousetraps *need* profitable business models to create long-term value.

Peter Thiel provides an excellent lens to view this problem.

In his Stanford talk, [Competition is for Losers](#), Thiel describes the foundational formula for all innovative (read: mousetrap) business models:

Dollars of Value Created x Percentage of Value Captured

Easy enough, right? Well, it's remarkable how often innovative companies completely forget the right side of the equation.

Thiel mentions two famous examples of mousetraps capturing basically *none* of the economic value their inventions created:

- Airlines
- Railroads

Customers hired airlines and railroads to do the job of traveling thousands of miles in a fraction of the time it took by horse or car. Both inventions were exponentially better mousetraps than their competition. Emerson Milkshakes, if you will.

And in the process, these inventions spawned billions of dollars of economic value for various counterparties.

Despite widespread adoption, both industries bore shitty businesses and destroyed shareholder value. The airline industry has generated ~\$0 in economic value for its participants. At the same time, most railroad companies went bankrupt as competitors competed away all the profits.

How could this happen? They forgot the right side of the value creation equation ... ***Percentage of Value Captured.***

We've focused exclusively on *business analysis* by asking, "why do customers hire products to do specific jobs?"

However, the financial analysis allows us to distinguish between good and bad mousetrap business models.

For example, a simple financial analysis of airline income statements would've revealed negligible percentages of value captured from their mousetrap.

On the other hand, Google's annual report showcases that they've figured out a way to extract a *very high* percentage of the value they've created and turn it into profits.

If there's one lesson you take from Thiel's speech, make it this: **The world's best mouse traps have zero value if they cannot find a way to extract some of what they create as profits for themselves.**

Verifying this part is the easiest step in an investor's process (a combination of business and financial analysis). Ask yourself these three questions:

- **Does the mousetrap currently (or will it eventually) generate positive unit economics for its job?**
- **How durable are those unit economics over the long term (5-10 years)?**
- **How confident are you that competition cannot a) create a better mousetrap and/or b) create better unit economics?**

Alright, let's regroup. So far, we've outlined Christensen's famous *Jobs To Be Done* framework and combined it with Emerson's mousetrap theory.

We then discussed why companies should focus on creating the best mousetrap and crafting a business model that takes some of the value it creates as profit.

The last part of this *Note* synthesizes all we've learned and attempts to answer one question: **How can we tell if one mousetrap is better than another?**

Bringing It All Together: Choosing The Best Mousetrap

I don't want to come across like I've "found" the answer to the question "How can we tell if one mousetrap is better than another?"

I've pounded my keyboard multiple times during this writing, trying to answer the above question.

However, I think I have a good start. Please DM me with thoughts/comments/criticisms on what I'm missing.

Think of a mousetrap's long-term value as a three-legged stool ...

- **Stool 1: The quality of the mousetrap (product/service)**
- **Stool 2: The quantity of the economic value extracted (business model)**
- **Stool 3: The discount embedded in the current market price (ROI)**

Next, we assign each leg a 1-5 scoring system, with 1 being the worst and 5 being the best in its respective category.

We can then rank an investment opportunity **by the sum of its three-legged stool score**.

Let's use our McDonald's Milkshake to test our ranking system. Our milkshake scores a **4** on Stool 1. Customers can quickly order it on their way to work. It only requires one hand, takes ~20 minutes to consume, and fits perfectly into the cup holder.

Then there's Stool 2. McDonald's sells milkshakes at a ~60% profit margin ([guesstimate](#)). It extracts a large percentage of the value it gives customers as profit. Stool 2 gets a 5.

Suppose that McDonald's charges \$1 for its milkshake but could easily charge \$3 next year with little customer churn. In this situation, the Milkshake scores a 4 as McDonald's currently sells its milkshakes at a market discount of \$1, which should re-rate over time to \$3.

Total score for milkshakes = **13/15**

What about a competitor, like a banana? How would it score? Let's see!

Bananas take 30 seconds to eat. What would a customer do with the remaining 19 minutes and 30 seconds in their commute? Plus, customers would be *starving* come mid-morning. Stool 1 gets a 2.

What about Stool 2? Bananas generate ~10-15% profit margins for grocery stores, significantly less than our milkshake's 60% margin. Stool 2 scores a 2.

Finally, bananas hold no discount as they're commoditized products. Not to mention one of the cheapest products in grocery stores. Stool 3 scores a 3.

Total score for bananas = **7/15**

It's important to note that these scores don't live in a vacuum. Given what we know about a job to be done, we should constantly update our scores as new information arises from new customer "hires".

I want to note that this is no perfect scoring system. However, it is a start. And I'm excited to evolve this idea over time, turn it into something repeatable that we can use when analyzing businesses, and collect scoring data around hundreds of company mousetraps!

That's what I've got in store next weekend. Next week's *Note* will take the principles we learned today and apply them to real-world investment opportunities.

I can't wait to share it with you!

We're All Just A Bunch of Milkshake Hunters

The world's best mouse traps find a way to create 10x better products for customers to hire *while also* extracting some of what they create as profits for themselves. These are our Emerson Milkshakes.

And it's **our job to find them.**

I'm willing to risk sounding hyperbolic here. But the fusion of Emerson's mousetrap idea, Christensen's *Jobs To Be Done* framework, and Peter Thiel's value creation theory is the most important addition to my investment process since reading Geoffrey Moore's [*Crossing The Chasm*](#).

There's still *a lot* to unpack with this framework. Rome wasn't built in a day, and neither was a proper synthesis of three distinct theories. But I am thrilled to work on it with you (the *Collective*).

Here's to Hunting Milkshakes.

Portfolio Updates

Sells

- **SOLD** Full Corn Futures Long
- **SOLD** Half Profits in Ethereum (ETHUSD)
- **SOLD** Half Profits in Russell 2000 (RTYM2022)
- **SOLD** Full Soybean Oil Futures Long
- **SOLD** Full Alphamin Resources (AFM.TSX) Long
- **SOLD** Full Northwest Biotherapeutics (NWBO) Long
- **SOLD** Full Paladin Energy (PDN.ASX) Long
- **BOUGHT & SOLD** Bitcoin (BTCUSD) Long
- **ADDED TO** Block, Inc. (SQ) Strategic Long
- **ADDED TO** Wheat Futures position (ZWN2022)