How to Day Trade Thoughts



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Introduction

We live in an era of big data. Companies thrive off of the information that consumers willingly give them. These firms keep detailed records about their customers, potential customers, past customers, and everyone in between in order to track what kind of decisions they are making and influence them to into making a specific decision. The extent of this data tracking was exposed when a large retailer tracked the data of a teenage girl's web browsing and, after predicting one of her future purchases, sent her coupons in the mail for maternity items, to the shocking surprise of her parents.

When it comes to buying and selling securities, though, decisions are not tracked nearly as closely, largely due to tight regulatory standards. While people have every right to keep their decisions private, is it possible to have a system that tracks the reasons for investor's buy and sell decisions, help remove some of the speculation surrounding financial markets, and ultimately make the market a more rational place in which to operate?

The Way Things Are

The day-to-day price movements of stocks have been given a tremendous amount of attention since the advent of the ticker tape in 1867, which provided anyone interested in the stock market

a way to keep up with price changes. And more advanced technology has drawn more attention to the ups and downs of the numbers on the screen.

Price movements are of course made by shareholders selling a stock for less or more than the previous selling price. If a stock sells at \$30 per share one day and the next day the shareholder sells it for \$29 per share due to less demand for the stock, the price chart will show a drop of \$1 per share. Similarly, if the demand for a stock is higher the next day and the shareholder can sell it for \$31 per share, the chart will show an increase.

When taken in aggregate, the billions of trades that go on with publicly traded equities create the price charts that are shown on any stock trading app or financial news channel.

Every single one of these trades must go through a series of complex processes involving the brokerage through which the trade was made, the clearing house that handles the transaction, and the brokerage that handles the trade from the person (or group on the other side of the transaction. Along the way, the institutions involved with the plumbing of stock exchanges capture a few pieces of information from the parties buying or selling their securities, such as the price, the date of the trade, and the security being traded.

There is, however, one vital piece of information not being captured.

That is, the reason the trade took place.

The Way Things Aren't

When someone buys or sells a security, they have a reason for doing so, whether it's because they need money, they are afraid that the market is going to take a downturn, or because they heard that their neighbor (who drives a new BMW) is doing the same thing. Yet, that reasoning (regardless of whether it's rational) usually stays in the mind of the person making the decision. Nowhere is it documented why these trades take place on a day-to-day basis.

Those who scrutinize the financial markets such as journalists, money managers, or politicians must make assumptions as to why the market is moving in certain ways. If a new trade tariff is announced on Monday, and on Tuesday the Dow 30 goes down 7%, it is assumed that the decline is due to fears about the trade tariffs, even though this is not a proven fact.

Entire industries are built off of this kind of speculation. Financial news websites, brokerages, and advisers all make money by convincing their clients that they understand these price movements better than others, and persuade them into employing their services.

What many mistake as news or financial advice is nothing more than blind guesses about what has happened, what is happening, and what may happen in the future.

The Problem

This speculation about the reasoning behind price movements causes a lot of unnecessary fear (and excitement) among the investing community as a large majority of investors in securities base their trades off the perceived decisions of others. Lord Keynes brilliantly illustrates this concept in his description of a beauty contest in which the goal was not to select the contestant you believed was the prettiest, but rather to select the contestant that you believed that the other judges would select as the prettiest.

Once this blind guessing gets rolling it's difficult to stop, as we've seen in multiple different financial crises where the selling of securities feeds on the selling of securities until a panic develops.

The Solution

A solution to removing the guessing game from the movement of security prices is to make transparent, in mass scale, the reasoning behind the trades. This solution would come in the form of an optional questionnaire presented to an individual (or in some cases an institution) when placing an order to buy or sell a security.

The questionnaire would consist of a few options for the trader to choose from (with an "Other" option available too which would change based on major events occurring at the time of the trade. In 2020 the main reason for a trade might be COVID, or in 2022 perhaps because of inflation, interest rates, or the war in Ukraine.

After being fed a large enough sample size of data, the institutions doing the plumbing of the securities would aggregate all the data into a presentable chart, which would display the top

reasons that certain trades were made during any given hour, day, month, year, or decade. Naturally, this solution could only become optimal with enough time and with enough data.

The data gathered could then be broken down by certain sectors, stocks, indices, etc. so that the countless amount of financial news junkies in the country could view a graph of trade reasonings, filtered by different parameters.

These collections of graphs could easily be displayed in the same manner and location as the graphs of a stock's price movement in trading applications and research platforms such as Yahoo Finance or Bloomberg Terminal.

Graphic Representations

Option Menu for Buy / Sell Form

Q BABA		8	Q BABA		e
\$85.74 +0.24 (0.28%)	Bid Ask 85.7 85.95		\$85.74 +0.24 (0.28%)	Bid 85.7	Ask 85.95
		C			
Action	Buy	~	Action	Sell	
Quantity 🖩	- 1	+	Quantity		1 -
Order type 🌒	Limit	•	Order type 1	Limit	
Limit price	- 0	+	Limit price	- (р н
Timing 🕕	Day only	~	Timing ()	Day only	
Reason	Select Reason for Buying 🐱		Reason	Select Reason for Selling	
	Stock is Undervalued			Negative Trade Re	elations
	New Products Release			Inflation	
	Strong Earnings Report			Debt Ceiling	
	Dividends			Presidential Election	on
	Stock Recommendation			Ukraine War	
	Industry Advantages			Weak Economy	
	Stock is Rising			Stock is Overvalue	ed
	Other: Type Reason for Buying			Other: Type Reason fo	

Buy Order

Sell Order

Added to the existing form that must be filled out with every trade, detailing the type of trade, the quantity of shares, limit price, and timing would be a drop-down menu for a user to select the reason for buying or selling their security. The options shown on the menu would change based on various things going on in the world, such as geopolitical factors, economic factors, earnings, etc. A system would have to be developed among brokerage exchanges to choose the reasons that appear on the menu and update the reasons on a frequent basis.

An "Other" option would allow a user to input a reason not listed in the menu, and these reasons could then be reviewed by exchanges to decide whether a different option should be added to the list. A similar system is used when returning a product on an online website in which it asks the user why they are returning a product.

With the widespread adoption of these features brokerage exchanges and market makers could aggregate the data and create graphs such as below that show the top reasons for buying or selling certain stocks, indexes, or ETFs.

Decisions Graph for Coca-Cola (Example)



(Decisions Graph 1) – Coca-Cola (KO)

The reasons behind buying or selling a certain stock would likely be very different than the reasons for buying or selling a broader index. There would, however, be some similar macroeconomic factors influencing the trading of a single stock. Above is a theoretical representation of a decisions chart on a widely known company, where a column chart depicts the top reasons behind the trades.



Decisions Graph fro Invesco QQQ Trust

(Decisions Graph 2) – Invesco QQQ Trust (QQQ)

A similar graph shows the decisions behind the buying and selling of a commonly traded ETF. While decisions behind trading of a single stock might be more representative of a micro-economic view point, certain ETFs would give a broader view of people's perspectives.



Illustration of Proposed Decisions Graph

Likely the most common graph that would appear is that of the S&P 500 which would be a culmination of trades made of S&P 500 ETFs, as well as an aggregation of certain macroeconomic reasonings that were selected during the trading of certain stocks, ETFs, or other securities.

These graphs would aim to clarify much of the reasons behind people's trading, and remove some of the speculation that goes on when trying to understand price movements.

In the same way that Meta and YouTube benefit by knowing torrents of information about their users, financial information companies would benefit by knowing more about the decisions of investors. They would likely be quick to push brokerages to start collecting this data so they could add it to their arsenal of big data on which their businesses thrive. Bloomberg alone makes enough from it's Bloomberg Terminal (as well as other products) to give it a valuation of over \$20 billion.

Capturing Data

Once the collection of this data becomes habit for a large enough group of people, the next challenge then relates to the difficulties of capturing all the data.

Even if such decisions were guaranteed to be anonymous, most institutional money managers would prefer not to share their thoughts on why they are selling. In fact, institutional managers rarely place trades themselves but rather do so through a bloated collection of staff members and brokers. And making certain things anonymous in this arena would be almost impossible as three or four companies in the world hold most of the decision power with stocks, and one could deduce with relative ease which firm made the trade. The only way to push the institutional investor to share their thoughts is through a regulatory requirement mandated by the SEC, which is unlikely to ever happen.

This concept then becomes highly targeted towards retail investors.

Having this system built for retail investors is not all bad, as retail investors, or very small institutional traders, are the only ones who might have any interest in knowing the opinions and thoughts of the masses. Institutional money managers have practically no interest in the opinion of retail investors unless it's to make a trade on the opposite side of their bet.

The preceding section lays out the systematic changes that would be required to implement such a system, but we have yet to touch on the psychological pitfalls that could result from it.

Psychological Challenges & Social Proof

Technology has already allowed people to share their opinions on practically everything, through liking an Instagram post, re-sharing a tweet, or leaving a 3-star review for a restaurant on Google; and others are quick to take these opinions as facts when there is an ample group who share the same opinion. In other words, social proof is as alive as it has ever been.

In some cases, social proof has its benefits. We've all found ourselves searching for a five-star rated product on Amazon or avoiding a one-star restaurant when going out for a Friday night dinner. But should we allow this same amount of social proof to seep its way into investment decisions?

The simple answer is, we already have. The idea of tracking people's decisions in buying and selling stocks and using it as a basis to make one's own decisions is nothing new. Technical analysts (people who look at charts to make decisions do exactly this. Similarly, plenty of investors watch the news hoping to pick up on some advice from a so-called "expert" on CNBC who claims they know what the market will do over the coming weeks.

What the proposed decision tracking system would do initially is bring more transparency to the reasons behind price movements, but inevitably it would start to serve as a news source of its own for those looking at the data.

Let's review a hypothetical.

The drop down options for buying or selling a stock would naturally be updated continuously based on what is happening in the world. Were this system to be around in the early 1960s, the Cuban Missile Crisis would certainly have been a top reason for selling. Today, potential reasons could include U.S. - China relations, war in Ukraine, inflation, etc.

Let's say an investor chooses to sell 10,000 shares of company A because they think it's overvalued and due to inflation. And let's say 1,000 other sell trades are placed for those exact reasons, making our chart look like this:



Illustration of Proposed Decisions Graph

Another investor, who may be less inclined to do their own research, looks at this Decision Chart for Company A and sees that stocks are being sold because others think they are overvalued and because of inflation. This investor then takes that graph as evidence that he should liquidate his stocks as well since "that's what everyone else is doing it."

The social proof then feeds upon itself, and when individuals go to make their trade, their actual reasoning becomes "that's what others are doing".

Again, this already happens. During a panic people sell their stock because everyone else is selling theirs, not because it's the rational thing to do. However, this system would present more information than just the direction of the stock price. But having more information does not guarantee that people will make better decisions. What we really want is for people to be more rational.

Rationalization - Psychological Benefits

During panic times, no matter how brief, people will sell their stock in rapid fashion as possible. If they place their sell order through an online brokerage, it may take less than a minute, with nothing during the process to halt them and force them to think through whether their decision is justified. These times of panic are often the best opportunity to buy stocks, as Warren Buffett wrote in an Op Ed he published during the height of the financial crisis titled Buy American. I am.

But, if someone is selling their stock through a broker they may be asked if they are selling for valid reason and then be encouraged to rethink their decision, assuming that they have a good and honest broker (an extreme rarity).

The psychological benefit of a reasoning question would be that the buyer or seller would be encouraged, for even just a brief second, to think about their decision, and perhaps stop them from making an impulsive move void of any rationality.

Essentially the reasoning questionnaire would aim to serve as an "are you sure this is a wise thing to do?" measure, such as the pop-up one receives when deleting an item saying "Are you sure you'd like to delete this item permanently".

Blissful Ignorance

With such a change to the security trading process the initial impact is easy to pinpoint - the availability, analysis, and distribution of more data, derived from people's decisions and the reasoning behind them. Naturally, news organizations, financial service companies, and indeed stock manipulators, would take advantage of such data.

However, the long-term impact is much less certain.

The optimistic result would be a more rational approach to investing with fewer decisions made on impulse and more made on a rationalized thought process. Given human nature, though, and historical evidence, this optimistic scenario is not likely. The pessimistic outcome is that this information would bring more unnecessary trading from retail investors who would use the data as guidance on what they should be doing, leading to even more instances of negative social proof and irrational thinking.

Almost all new innovations in securities markets bring about more speculation and increase the frequency of trading. The ticker tape made people obsessed with price movements in increments of eighths, Internet sites like e-Trade brought people into the murky world of day trading, and apps like Robinhood took speculation, gambling, and derivatives to a new level and to a new generation. While these inventions have been a benefit in some ways, such as lower commissions fees, they have on balance done more harm than good.

The purpose of this paper, then, is to propose an interesting idea, but not necessarily a good idea. Due unfortunately to human behavior and the temptation to gamble and act irrationally, this system would likely do similar harm. Therefore, the idea of Day Trading Thoughts is best left to the imagination.

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