
System Design Part I: Demystifying Systems



Therapist: "Ok, tell me your problems."
(grabs a pen and a notepad)

Trader 1

"I'm in a situation where I have many trades going on all at once and I'm feeling like throwing spaghetti on a wall to see if it sticks."

Trader 2

"Last week I got 10 naked puts running on +\$100 stocks. I was the Theta King. Suddenly, they all started to move against me and I got a phone call from the brokerage firm. I'm feeling miserable."

Trader 3

"I got 20 positions going on LIVE but I can't tell if I'm making or losing money and which strategies are working best."

Trader 4

"I wanted to make home run-ROIs on my small account so I placed many trades all at once. After three losses I got broke and I'm out of the game."

Trader 5

"My goal is to have a consistent monthly income but when I look at my trading account I can't see any connection between those positions.

Therapist:

"Yes (taking notes), I totally get that. I perfectly understand your situation."

Traders: "So, Doctor, what should I do? Does my problem have a solution?"

Therapist:

"Yes, sure." (stops taking notes and stares at the trader). "I got the perfect solution for your case: All you need is a system."

The trading session therapy scene just described is a cartoonish representation of a reality for many traders: they are lost in their own trading activity, feeling overwhelmed, stressed, unorganized, with no sense of direction, adrift, making decisions after the opening bell with their livers instead of their heads, flirting with the edge of ruin without noticing. If this is your situation, friend, we have just the right prescription for you: You need a system.

A good trading system will make you stay disciplined, organized, focused, consistent, structured with a sense of purpose. You will be treating your trading activity as a structured business, not some random hobby. It will make you adopt a System-Thinking approach.

By now you should be asking yourself: "What is a system anyway and what does it have to do with trading?". Stay with us. We'll be dedicating three editions of the Trading Justice monthly newsletter to System Design.

DEMYSTIFYING SYSTEMS

From the beginning: when talking about trading/investing systems with friends and family—not always a nice conversation, by the way—we often hear that:

- System equals Automation. So basically, we're building a robot or something similar.
- To build a system, you must be a tech-savvy person.
- If it's a system to make money (and, of course, this is our ultimate purpose), you're building something that is taking money from someone else by manipulating the financial markets and that is totally wrong. So, in other words, we're hackers and, probably, must be put in jail.

THIS IS NONSENSE.

Although we know some people are really into building robots with AI capabilities, many others are tech-savvy individuals and many are hackers, this is not what we are talking about. Clearing any misconceptions about what a system is is the first step you can take in the right direction.

What is a System?

So, what is a system? Here are three interesting definitions:

- 1.** A System is a set of things working together as parts of a mechanism or an inter-connecting network.
- 2.** A System is a set of principles or procedures according to which something is done; an organized scheme or method.
- 3.** A System is a set of detailed methods, procedures, and routines created to carry out a specific activity, perform a duty, or solve a problem.

So far, none of the above definitions have anything to do with the misconceptions presented in the first place: none mentioned robots or automation; none mentioned that only tech-savvy people could do it and none mentioned hackers taking money from poor people.

To move you from concept to the real world, where systems are tangible, we listed a few simple examples of both trading and non-trading systems. As non-trading systems we have:

- Your own body;
- Any American Football Playbook;
- iOS, Windows, and Android;
- Facebook;
- An electric guitar.

With those five examples, we didn't even scratch the surface. Systems are everywhere. If you add to the list your TV set, your refrigerator, your mobile phone, car, Netflix, and your microwave oven, that is, things you use on a daily basis, you can almost say that we live inside the Matrix. We could add to the pool the political system, economic system, banking system and make the list goes on and on until we list the whole Matrix's inventory.

Examples of systems

NON-TRADING SYSTEMS



HUMAN BODY



MOBILE PHONE



CELLO

Now, referring specifically to the financial markets, we have **trading/investing systems**. These are systems built by traders and investors to make money in the long run. There are literally thousands of trading systems out there, some fully automated and some not at all. Here are three simple examples:

- **Condors for Cashflow by Tyler Craig.** According to him: "This is a high probability option selling system designed to generate passive income over time. We are short perception, long reality."
- **Environmental Hedging by Robert Shannon.** According to him: "With this system, we take money away from corporations that are a net-negative on our social and natural environments. With said profits, we compound the gains into companies which are a net-positive on our social and natural environments. We will then cashflow from these long-term positions, of which, we will use the profits cleaved to better the human/environmental landscape on a personal level."
- **Personal Gold by Matt Justice and Robert Shannon.** According to them: "It would be interesting to see Wall Street behaving as an exchange again and not as a member of the service industry. By its very nature, the stock market is a tool of wealth redistribution or wealth concentration. If "the few" understand and primarily use the market, then it is primarily a tool of wealth concentration. If, however, "the many" are involved in the market, it is a tool of wealth redistribution. [...] Active-investors can have, in many ways, a democratizing effect on society (at least by way of investment). They have the potential to expand the enterprise of the good at the expense of the bad and can individually distribute capital in what ways they choose."

- **Berkshire Hathaway by Buffett & Munger.** According to Buffet in his 2017 Letter to Shareholders: “In our search for new stand-alone businesses, the key qualities we seek are durable competitive strengths; able and high-grade management; good returns on the net tangible assets required to operate the business; opportunities for internal growth at attractive returns; and, finally, a sensible purchase price.” Although every business is a system, Berkshire Hathaway is a system built specifically to make Buffett & Munger a fortune over the long term. If you had the opportunity to read the book “The Snowball: Warren Buffett and the Business of Life”, by Alice Schroeder, you will know what we’re talking about. We’ll be talking more about Buffett’s system in a while.

Systems and Automation

This is the most common misconception about what a system is. People often think that system is the same as automation but happens that they are both different things. Whether you automate your system or not, you still got a system. Every automation has a system behind it, but the opposite is not always true.

That doesn’t mean you can’t or you mustn’t automate or semi-automate your systems, especially if you know the trading platform language and can easily write scripts. Here are some examples of simple semi-automations that can be used on trading systems:

- Alerts on a specific price level;
- GTC orders that will trigger you out of a losing position;
- GTC orders to buy back options contracts at a certain net liquidation value.

Obviously, trading systems are not limited to those automations. Possibilities are virtually endless, especially if you’re a prolific developer and script-writer.

The “System-Thinking” approach

We, humans, create systems all the time, we operate daily in a system-like fashion, but most of us never took notice of it. From the Nature itself outside your window to those few examples we’ve cited just a while ago, everything is a System.

Richard Denis, the father of The Turtles once said:

“I always said that you could publish my trading rules in the newspaper and no one would follow them. The key is consistency and discipline.”

In fact, his whole system is described in details in the book “The Way of the Turtle”, written by Curtis Faith. Read it and you’re going to find out that many of the Turtle Traders just failed to make money. If you had never ever read this book you must be shocked by what you’ve just read: “many of the Turtle Traders just failed to make money”.

Yes, it’s true, although incredible. Why? Why did they fail? They had the “Prince of the Pit” as a mentor and teacher. They’ve learned from the man himself all the ins and outs of a winning system. They were given accounts with real money to trade. What happened??

The mindset. The mindset behind a trading system is everything.

You can have the best system in the world, backed up by the best idea there is, taught by the best trader available. Without the proper mindset backing up a proper execution, you will fail epically.

Some traders of the Turtle class were hesitant in pulling the trigger and lost the entry point. Others would overthink and over-analyze the rules. Others would improvise.

It all boils down to the mindset behind a trading system. When a given system depends on us to execute it, we fail to deliver what it needs. We think too much, contextualize too much, hesitate too much, feel too much, analyze too much, fear too much, hope too much. No wonder why computers are so fast: they just execute the rules inside the system they were built to be running. When you click **OK** or **SAVE**, or **PRINT**, or **UPLOAD**, or **CANCEL** on a computer screen that’s just it: RUN THE RULES. This is what computers do. We don’t.

But we can. Just like computers, we can run the rules without hesitation.

This is what we call The “System-Thinking” approach. It consists of a mindset that neutralizes our feelings and emotions. Fear, greed, hope, and despair—although part of our innate set of evolutionary capabilities—are bad for trading systems. The “System-Thinking” approach brings order to this chaos, removing the (too much) human part from trading.

We have to get practical and show you what do we mean by “System-Thinking” approach.

You have a day full of things to do. You are always busy and feeling you can’t take any more tasks, otherwise, you will implode. Your productivity is lagging behind.

What if you start considering that your entire day is a system that you are running, from the moment you wake up to the moment you hit the hay? No randomness. One task leads to another or must precede others in order to make your day work like a charm.

What if you make a simple workflow of your entire day using Post-it notes connecting one another with arrows? Grab some notes and let’s do it:

- **Step 1:** Name each Post-it note with a specific activity and put the hour of the day the activity happens.
- **Step 2:** Stick them all to the door of your refrigerator, or on your desktop.
- **Step 3:** Get a fat marker pen and start connecting the notes with arrows.

There you go: you just witnessed your day, marveled at its complexity, but, nonetheless, understanding each and every task that makes an entire **DAY OF YOUR LIFE**.

Your own system.

To improve your system (your daily routine), move the notes around, change the time of the tasks, rearrange them all, get rid of unnecessary ones, insert others. The goal is to be more productive.

Once you got everything in place: RUN IT. Follow it mechanically, to the letter, with no improvisations, just like a computer would do.

You can use this approach in virtually anything you want. From your business to your household routine:

Step back » Identify the tasks » Arrange them in one place where you can see all of them together » Connect them » Rearrange them » Get rid of unnecessary tasks » Insert necessary tasks » Rearrange tasks » Looking good.

Once you got everything in place: RUN THE SYSTEM. This is the System-Thinking approach in a nutshell.

A day in the life

YOUR DAY IS A SYSTEM

EXERCISE
After this very simple 3-step exercise, you're going to see your entire day as a system that you run from the moment you wake up to the moment you go to bed. Grab a few Post-it notes, a fat marker and let's do it.

RUN IT!
Once you got everything in place: **RUN THE SYSTEM**. Follow the rules mechanically, to the letter, with no improvisations.

- 1 List activities**
Name each Post-it note with a specific activity and put the hour of the day the activity happens.
- 2 Connect notes**
Stick the notes to the door of your refrigerator, get a fat marker pen and start connecting the notes with arrows.
- 3 Rearrange notes**
Improve your routine by moving the notes around, change the time of the tasks, rearrange them, get rid of the unnecessary ones.

6 KEY TO A SUCCESSFUL SYSTEM

Warren Buffett is now almost 90 years old. He is one of the most successful investors of all time, no question about it. One day, just like the rest of us, he will pass away. Even if he lives until he's 110, he's pretty close to his final days.

Do you think he will just leave all his investments and spreadsheets over his desk, sip a glass of icy cold Coca-Cola and cross the bridge that separates us from the dead?

We highly doubt that.

We're pretty sure that he is teaching his System to the people that will carry on his legacy. And with "legacy" we don't mean his fortune, but the System itself. We bet he can lose all his money by tomorrow and still die very rich. His System is worth much more than his net worth. The ones who are learning from him are the ones who hold the key to continue his success.

Many authors throughout the world have tried to see what's inside Buffett's head but tacit knowledge is, per definition, untouchable. Nonetheless, some of them have successfully laid out at least some parts for us mere mortals to learn something. For the sake of illustration, we can speculate (just a little) what's inside Buffett's System.

- When to buy a business.
- How to buy a business.
- How much to pay for a business.
- What kind of businesses to buy.
- How to analyze a business.
- When to sell a business.
- How to sell a business.
- How to generate income from the businesses.
- How profitable this business is and will be in the future.
- How to take profit.
- When to take profit.
- How to take losses.
- When to take losses.
- How to hedge investments as a whole.
- How to hedge a specific position.

We could go on and on with this list but you already got the gist. You're going to see for yourself, as you build your own trading system, that yours will have pretty much the same outline as Buffett's.



What can we learn from the Oracle of Omaha in regards to his system? Here are six absolute must-haves for a system to be considered successful:

Key #1: A successful system has an edge

Simply put: a successful system makes money over time because of its edge. According to Curtis Faith in his book "The Way of the Turtle", "[...] *an edge in trading is an exploitable statistical advantage based on market behavior that is likely to recur in the future. In trading, the best edges come from the market behaviors caused by cognitive biases.*"

Trading per se doesn't have any built-in edge. Buying an asset at a certain price and then selling it back at a higher one is not an edge; it's just trading itself. Without an edge, your trading business will have no better chance than that of throwing darts on a wall. Market players are not rational in their decision-making process and this is where the golden opportunity lies.

When Coach Tyler mentions that "We are short perception, long reality", that's his system's edge. When Buffett says "I like to buy a dollar for 50 cents", that's his system's edge. Any market behavior that is likely to recur in the future can be used as an edge to make you money over the long run.

Key #2: A successful system is teachable

Your system should be capable of being taught. In other words, you should be able to easily teach your system to whoever wants to learn. It should be easy to explain its concept, procedures and final goals.

Key #3: A successful system is repeatable

Something that is repeatable can be done repeatedly, without losing its effectiveness, context or essence. Once taught, anyone must be able to easily reproduce your system obtaining the same results.

Key #4: A successful system has a long run survival

Your system must survive any market conditions, any financial landscape. Warren Buffett knew this when he began to buy wonderful businesses at a discount way back in the late 50s/early 60s. Since then, technology has leveled the playing field between professionals making identifying both good and undervalued businesses harder over the years. This makes us immediately recollect Buffett's edge. Is it becoming blunt over the years? Has he lost the Midas Touch? What is wrong with this playbook?

To ensure your system's long-run survival you have to:

- Rely on a solid Mission/Concept - We will explore this subject further down the series but have in mind that every system must have a clear mission, a clear concept behind it. It is one of the 3 cornerstones of any successful system.
- Keep your edge sharp - A system can lose its edge over time due to changes in market dynamics. However, the markets will always be plagued by intense mood fluctuations, herding effect, short-sightedness and cognitive biases, no matter what, so, the only thing you have to do is develop ways to continuously take advantage of it. Keep your edges sharp. Adapt to survive, the Darwin way.
- Have good money management - That's Key #5.

Key #5: A successful system has good money management

Money management refers to managing the size of your risk to ensure you can withstand losing streaks, which are inevitable in any trading business. Good money management is essential for a system's long-run survival. Your positions must be sized at an acceptable level of risk while you maximize the profit potential.

Key #6: YOU

This is, by far, the most important key of all six. A successful system is one that YOU can execute perfectly, flawlessly. A successful system is one that fits YOUR style of trading, your whys, goals, your daily routine and your personality.

Sure there are thousands of systems out there that produce wonderful results over the long run, but do they fit YOU? Can YOU execute them?

Buying a system because it works and not doing it right, not following the rules, not running



it consistently, is definitely not the way to go.

On the next edition of the System Development series, we'll be talking about the MCO Framework, the 3 ultimate cornerstones of any successful system.



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Our mailing address is:
team@tradingjustice.com