

edge fund pitch books often point out their managers' ability to control emotion. Supposedly, this is a good thing. Ironically, however, an investor can usually find a point in the exact same book emphasiz-

ing the manager or trader's prowess in identifying high-conviction ideas. The combo of no emotion and strong convictions tends to be the assumed gold-standard of market talent.

Yet, think for a moment about your literal experience of conviction. Focus on a positon or trade that you have recently been very sure about. Is conviction a thought or a feeling? Where within your being - head to toe - does conviction happen? If you are hon-

> est, you say in your gut. Sure, you use the thoughts in your head to analyze your factors, but the fuel that makes you pull the proverbial trigger emanates from somewhere else. Conviction delivers a physical-bodily experience. Or, in other words, it's a feeling.

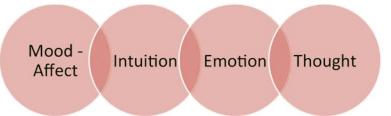
"Enotion determines "Enotion determines "Enotion determine out never and the organize out now we perceive out and make now me norwand ections" Maybe, shockingly, even quants have feelings. An algo stems from a model and a model includes variables like implied volatility. Systematic traders make judgment calls too. They choose factors, they recalibrate those calls and sometimes they even must choose which algo fits a given market regime. The systematic approach frees the quant from many of those emotions on a daily execution basis but even that is a conscious decision made on emotion. We fail ourselves and our investors when we mistake these tools for algebra. The assumption that systematic trading completely removes emotion is a myth! Decision neuroscience essentially declares that without emotion, we can't decide what shirt to wear or what day to make a dentist appointment. We depend on the feeling of what is appropriate or doable. Context counts and the puzzle of a situation arrives in our awareness as a feeling. As decisions become more complex, the need for a sense of things becomes more not less important.

The difference between a senses, feelings emotions

Senses, feelings and emotions exist on a spectrum spanning what scientists call affect to more intense experiences we recognize as emotion: Fear something will go wrong, frustration over something not working, happiness over something desired happening. Everyone learns to think. We don't learn to feel. In fact, we learn not to. We put our focus on our intellects without realizing that thought is not only the most superficial of our mental capacities but is always layered on top of our more visceral dimensions.

The easiest way to comprehend the mental baseline that you bring to every risk decision- these mild feelings of affect — is to think about the difference in how you feel before and after coffee, unmotivated to optimistic; or before and after a cocktail, nervous to calm (see "Continuum of feelings," below).

CONTINUUM OF FEELINGS



Next in your continuum of feelings comes affect with a target. The sixth sense, intuition and unconscious pattern recognition that we sometimes experience when we analyze a situation is also called felt-based knowledge. In investing and trading we dismiss gut-feel but like the "no emotion-convicted" conundrum above, most of us also respect the mental state of feeling a calm confidence about a market prediction. Jennifer Lerner of Harvard has in fact been known to categorize these types of feelings as integral to a decision. Despite what some Behavioral Finance experts say, the evidence is mounting for the validity of intuition that is properly sorted.

On the continuum of feeling, emotion comes next. More intense bodily experiences, fully infused with meaning, can certainly get our attention and rapidly motivate us to act. We feel afraid of taking a loss and without examining the feeling, jump out of a position at the worst possible moment. Later we blame the emotion when in fact it was the behavior not the intense feeling that caused the ill-timed loss. An emotion never lost a dime on its own.

Your Biggest Ally

In his recently released book *The Global Macro Edge: Maximizing Return per Unit of Risk,* John Netto calls emotions your greatest ally. He explains how knowing what he feels helps him not only to predict what other market participants will be doing, but maybe more importantly, keeps him out of his worst trades. He knows if an intense fear of missing out compels him to get short that he should question the wisdom of that urge. He uses his knowledge of the catalog of emotions induced by the uncertainty of the market to manage human risk. In contrast, the trader or portfolio manager who only ever tries to control emotion never acquires that knowledge and loses the opportunity to have a more nuanced window into their evaluations.

The idea of emotions as information may be startling but Netto is simply applying findings from the neuroscience of perception and judgment. A systematic trader could consider it as degree of freedom to consider.

Another recent book, by Lisa Feldman-Barrett of Northeastern and Harvard, destroys any notion of a separation between thinking and feeling in her 2017 book *How Emotions are Made*. Decision-making specifically and human performance generally arise out of one fully integrated system where there are no lines between thought, feeling and emotion. The mind travels back and forth across the spectrum from affect to emotion and as it does so, thoughts emerge.

Our minds work like cars with all the parts interacting to create movement — or in the case of investing and trading, thoughts, feelings and emotions combine to help us find and execute our best ideas and either creates or avoids our worst losses.

To put a finer neuroscience point on it (and to speak to some traditional trading psychology and behavioral finance tenets), there are no circuits or parts like the amygdala dedicated to fear and the brain isn't a three-layer cake where the first two layers are old and only serve to support the top. This model is called the triune brain and the idea is outdated. Dismiss anyone blaming the amygdala or talking about the old brain, instead spend the time tuning into your internal experience to discover what your unconscious is working on.

That process is called interoception - the ability to recognize sensations in our bodies – and it correlates with profitability and longevity in investing and trading. Multiple studies, many conducted in London, have shown that an investor or trader's awareness of their body, feeling and emotions improves market calls just as Netto describes.

If you have spent your whole career (and maybe your

MAKING BETTER DECISIONS

Avoid poor decisions with these steps, starting with a position that is working.

- 1. Recognize and accept that the exit of a winning position almost always creates a negative feeling. If you know you are going to feel badly when you normally expect to feel good, it's easier to untangle when it happens.
- 2. Identify and rate the degree that you are afraid of missing out on future profits and simultaneously afraid of giving back profits. Recognize that you have two sets of feelings that are in conflict.
- **3.** Ask which event is more likely to happen and go with the first answer that comes to mind. Will the price keep going in the direction you want it to in the timeframe you are playing in? Or not?
- **4.** If the answer is no, exit and turn your attention to your fear of being wrong or feeling bad in the future so you don't end up jumping right back into the position.
- **5.** If the answer is "yes," stay in and turn your attention to the same fears of being wrong and feeling crappy in the future.
- **6.** Take a deep breath and find the fear of regret in your body. Write about it and if you can, talk to a trusted colleague about the fear. Own it.

whole life) trying not to pay attention to your feelings, you need to learn to become aware of your emotions. First, orient your development of this skill towards the challenge of repetitive mistakes. Avoid repeating the pattern of your worst 2016 decisions by trying the following ("Making better decisions," above).

It seems elementary but research shows that simply putting all our feelings into words disrupts their power to automatically turn into decisions. No one can tell you why language works this way but verbalizing feelings dissipates the static-like internal noise compelling you to act.

Decision Neuroscience as an Edge

To come full-circle, consider the fact that intense confidence equals conviction. Conviction is an emotion as it's a relatively intense bodily experience. The doomed attempt to be convicted but have no emotion only serves to further confuse us in this global, never-ending poker game we call the market.

On the other hand, capitalizing on the new clarity around emotion gives a manager or trader an additional exploitable edge. One client who implanted emotion analytics went from a 1.5 to 2.3 ratio in his size of winners to losers. At the same time, he increased his win rate from the 55% to more than 70%. Most of your competition will continue to resist understanding and analyzing both their predictive and risk management feelings. Every time you exit better because you avoided acting out an unrealized feeling, you save the cash and mental capital. You set yourself up to better execute on the next opportunity. This mental state optimization indeed creates alpha. \triangle