Solve For Y

The line was longer than normal. Sam struggled to measure normal, but he knew the line wasn't shorter than it. He turned to ask his friend Stacy "Wasn't it empty in here yesterday?" Stacy tilted up with "Yeah, we've talked about this. There's no pattern here: today busy - tomorrow something else. These people are like lotto numbers." In fact, the customers there, in Big Y, had become a bit of a standard for unpredictability. Through their observations, Sam and Stacy had stumbled onto something far greater than they realized. They stood there and witnessed the chaos engine in motion armed only with their jokes and wonder.

Big Y was a regular old supermarket near the center of regular old Pittsfield, MA. It had all the usual supermarket stuff along with all the usual grocery things one would expect to find in a place like that. Sometimes people would flock to Big Y while other times would see a virtual purge of all signs of life. There really was no predictable expectation for the volume of customers on a given day. It was a mystery unworthy of attention and one discreet for that reason. Sam and Stacy were about to solve for why, but, at this point in the story, they knew nothing more than you or I do.

Like most days, Sam and Stacy were among the rabble at Big Y, quickly getting lunch that day. The regularity of their visits granted them keen judgment of the crowds there. To notice the gross variability of the mass was to notice the impossible - the immeasurable. "Do you think all these people are here today because it's the start of the month?" Sam guessed aloud. "Nah, I think it's the weather" Stacy theorized. "Maybe there's a sale we don't know about" added Sam. The two stood for a moment considering other factors in the equation. As with other times they ran this same thought experiment, though their conclusions turned up nil.

Per usual, the next day told a different story in Big Y. This time saw a similar swarm, but in waves that favored certain registers over others. Sam and Stacy opted for different lines as they each placed their bet on the fastest way through. During his wait, Sam was greeted by the store manager who was fishing for feedback. Sam briefly summarized what he and Stacy had come to know concerning the imbalance of daily traffic. From there he suggested that maybe the manager stagger sales and other promotions in an attempt to balance the action. The manager agreed and went to work crafting a load-balancing scheme.

A week went by before the manager at Big Y implemented his plan to shape a more consistent shopping experience through targeted sales. Each day would feature a different hot item to distribute the customers evenly over time. His plan worked and the pattern appeared to normalize as Monday resembled Tuesday resembled Wednesday. Unfortunately, on the fourth day, the weather outside became less cooperative, creating a hiccup in the new flow. By the fifth and sixth day the weather patterns had become even more chaotic and pronounced. As the order grew inside the store, the conditions outside formed an inversion of chaos.

A month went by and the lines at Big Y had never been more consistent; every day more predictable than the last. Likewise, storms continued to rage outside with increasing intensity. One day the storms were so bad that people stayed home and Big Y saw almost no customers, breaking their new pattern of predictability. That same day, the storms subsided in another surprising inversion. The store manager thought to himself how odd the correlation of chaos and order both inside and out. He knew there was no connection, but still it was odd. Sales experiment disrupted, he went back to business as usual.

Following the storms, Stacy stepped into Big Y ahead of Sam as they both recognized the familiar old chaos of the unpredictable crowd. "Looks like we're back to normal" she said to the other. "Yeah, the abnormal" snarked Sam. Waiting in line, Sam was approached by the manager, reminiscent of five weeks prior. The manager started "Hey, that idea worked! For weeks we had a steady flow of customers hampered by some crazy weather outside." Sam half-joked "Heh, you don't think the customers and weather are connected do you?" After their exchange, Sam relayed the info to Stacy who shrugged and catalogued the thought.

Another day and, again, the weather was nice as Sam and Stacy approached Big Y. Predictably the scene inside was a mess. This lent to the idea that the chaos inside and the order outside were somehow inversely connected. The two friends remarked how this absurd connection was inching beyond mere coincidence. Another week and, still, every day this inverse correlation - chaos outside and order inside or sometimes the opposite. Once the idea was born to them, this connection became uncanny and obvious. Sam and Stacy started taking notes of this phenomenon; mental at first and then literal. The idea was silly, yet the coincidence persisted.

Stacy devised an experiment: she would rearrange products in the store. Every day, every trip she would rearrange the same products in the same way. Her goal: achieve order and consistency, on a small scale, within Big Y. Stacy conducted her small, experimental order over the course of several weeks. During that time, Sam kept detailed notes of the weather outside. The two purposely avoided the other half of the experiment to minimize bias. After those several weeks, Sam and Stacy compared their internal and external notes, realizing a pattern. As Stacy created some level of predictability inside the story, the weather outside the store became less predictable. As expected, these two unrelated things were actually engaged in an act of balance.

To confirm their hypothesis, Sam and Stacy set out to disrupt the flow of business within Big Y every day. They took to misplacing items, joining the longest lines, walking different paths through aisles, and other such random acts. Every day their internal disruption was met with calm, perfect weather outside. In their minds, the effects of order in and around Big Y were undeniably intertwined in this relationship of opposites. Sam didn't understand why. Stacy couldn't solve for why. It just happened and they could witness and affect it, but it made no

sense. Something impossible was happening there, at Big Y, and only two people in the world knew about it. Should they tell and who would listen?

"You're crazy" said the store manager at Big Y. Sam and Stacy had presented their evidence in the clearest, most concise way they could, but the manager just said they were crazy. "Is there a manager higher than you?" Stacy muttered in a last ditch effort as they walked away. To Sam she asked "So do we just tell random customers to be more random or bad things will happen? That is, as the manager says, crazy." And again, who would listen? The duo walked their notes and ideas out the front door. On the way out they shouted random words and pushed things in an attempt to restore peace outside through disorderly conduct. Of course, they emerged to a pleasant day just outside the store.

"You're nuts" said the officer at the Pittsfield Police Department. Sam and Stacy had marched their traveling presentation to the next accessible authority. Their hopes of convincing others that Big Y was actually a critical component of the world were fading with each rejection. The two packed up their things and headed out to convince other people. Outside, the sky was growing dark and they knew that Big Y must have grown too orderly - maybe another distribution of sales again. Sam rushed back to the store to wreak a little havoc, for the good of the world, while Stacy went off in search of someone who might listen. Maybe a scientist would know something? Maybe a paranormal expert could sense something?

"You're insane" said the psychic from behind her desk. Stacy had landed in the local tarot shop where she envisioned a more open mind. Knowing that Sam was probably messing things up at Big Y as they spoke, Stacy tried convincing the psychic through predictive means. "You see this storm outside? It will clear up completely within 5 minutes" Stacy prophesized in a bold manner. Well, not more than 2 minutes later, all signs of foul weather had cleared with no lingering effect. Impressed, the psychic bought into the whole Big Y story a little bit. She was at least willing to hear more. Stacy obliged and laid out the entire story, as she knew it, from start to finish. Upon completion, the psychic, whose name was Claire, was all in on the big question of Y. Claire offered her psychic energy to the charge.

"You're wrong" said the meteorologist from the local station. Stacy had gone to the local weather expert to explain the implausible connection to random activity within Big Y. Understandably, the meteorologist was set to reject the notion. "Well how do you explain the unusual weather patterns we've seen?" posed Stacy. The weather man replied "Sometimes weather just happens, you know? It just does its thing and you can't explain it." Unhappy with the weasel nature of this man, Stacy stormed out to find Sam approaching. "Don't waste your time, this guy doesn't know anything" she warned. Sam chuckled "You mean he can't explain how I knocked over a display in Big Y and it made the storm clear?" They carried on down the street in search of more experts.

"You're absolutely right!" said the physics professor at nearby Berkshire Community College. Professor Wainwright seemed to understand exactly what Sam and Stacy were going on about. He explained how he too had realized the odd happenings at Big Y nearly two years prior. Over those two years, the professor had run experiments of his own and analyzed a wide variety of data points. Wainwright had reached a theoretical conclusion that the world wasn't ready for. Once revealed, the world could face its own theoretical conclusion. Indeed, the fate of the entire world was wrapped up in this interplay between Big Y and the weather outside and professor Wainwright had solved for why.

Professor Wainwright had assembled the team of Sam, Stacy, Claire, and his assistant Martin. Over the course of several hours, Wainwright went on to explain his findings. Professing great detail, he described how the world is really just a computer simulation designed to solve the chaotic pattern of customers in Big Y. Every time that pattern becomes a little more predictable, the simulation inches that much closer to solving the problem. Once the simulation solves the pattern of Y, the program ends and the world is completed. This is why the weather responded to the order inside the store. It was the simulation's way of completing an objective and winding down to an end. In short, the conditions inside Big Y must remain unpredictable or risk a solution that renders the world complete - finished.

Claire broke the silence with "Ooh boy, that is some kind of story. You almost had me going there for a minute." Martin, the professor's assistant, objected "It's no joke. If Big Y becomes too predictable, it becomes solvable and this simulation we live in will come to an end." The team's first inclination was to rush back and completely disrupt the flow in Big Y, but that would be a predictable response following such a revelation. Sam and Stacy discussed their very predictable pattern of daily lunch trips there. They wondered aloud how to be less predictable. How does one plan the unplanned? As a group they decided to head back to the store anyway. Maybe something there would present itself in a way that points them down a proper channel.

Back at Big Y, the team of five went inside to sow their own brand of chaos. In order to keep the simulation guessing, Stacy disorganized the magazine rack. Sam moved a sign to indicate one of the registers was closed when it was really open to disrupt the lines forming there. Martin reached for a product just as another customer attempted it to enhance the growing confusion. As a group, they were adding unseen layers to the internal process, prolonging the simulation. These minor inconveniences served to ultimately hinder the program by making a solution unattainable. Seeing the commotion, the store manager took to the floor to locate the source.

"Hey, what are you doing? Why are you messing up my store?" asked the manager with an air of cluelessness. The team gathered to bombard the manager with their incredible findings. Now with a look of shock, he replied "That old idea I had with the weather? No way that's real."

Professor Wainwright assured the manager that there is definitely a cause and effect in place with Big Y being the root cause. Following the unpredictable stir caused by the team, the weather outside was calmer than ever. Still in disbelief, the manager barked "Get out of my store!" The team regrouped in the beautiful weather outside the store.

Sam threw out the first pitch "What do we do now? Stand around and badger people entering the store?" Wainwright considered the thought and elaborated "I think we take shifts holding up confusing signs and behaving erratically in front of the customers." Claire offered to take the first shift and crafted a rudimentary sign that read "Big sails on Big boats at Big why". Messages like this were perfect because they left the customers and the simulation guessing. The customers would see these dumb signs and enter the store in a state of confusion. It was a good way of getting unpredictable behavior into the store from outside.

Martin took the next shift and drew up a sign stating "All people, all places, even apples". As he stood there with his inexplicable sign, a news van pulled up. A reporter, with a cameraman in tow, hopped out and started asking questions about the apples. "No, no, I don't care about apples. We have to be original. We must add something new to the world or risk oblivion" he preached to those watching. The reporter didn't understand any of the messages, but many watching from home caught on. They didn't necessarily understand the significance of Big Y, but they got the core concept that the fresh idea bubbles up while the stale idea sinks.

After this show of farce, the store manager demanded the team leave the premises. The local police department showed up to escort them off even as the officer said he kind of liked their story. The disruptive team stayed away for several weeks as they discussed strategy in private. During their time away, Big Y settled into a stagnant, predictable stew. So predictable, in fact, that the world simulation began to solve the puzzle and wind down. The weather was at it again as the world rejected the bland movement passing for activity in Big Y. The theory of Y needed no additional confirmation, yet here it was again. As the model failed, with less action to predict inside, the conditions outside failed in parallel.

One day, without any real prompting, a crowd gathered outside Big Y. This crowd had forged weeks earlier in response to hearing Martin's message on the news. It took time to coordinate and the weather had been bad so they functioned in secret. On this day though, the small crowd of some twenty people gathered there to be original. They so enjoyed the idea of adding something new to the world, they just had to go to this place and see if Martin was there. Of course Martin was not there, but the crowd gathered in wait anyway. While they waited, some decided to do a little dance. Others offered whatever new thing they could to this unique show of art. Almost immediately, the weather cleared as the simulation struggled to process this spontaneous display. The world could not comprehend this new thing.

The awkward group and sharp weather shift was enough to bring the news crew back. Claire, the psychic, saw the demonstration on broadcast and called the rest of the team to

ignore the store manager and meet back at Big Y. One by one the team made their way to the storefront where they were met by an increasing crowd of hundreds at that point. The crowd cheered as Martin arrived; it was his message that drew them together after all. Professor Wainwright completed the team of five and, by that time, the crowd was easily a thousand or more. The store manager, overwhelmed, could really only stand by and watch it all unfold. After witnessing the sudden change in weather, he finally accepted the Y theory of simulated reality.

Martin addressed the crowd "People, your individual, unique contributions here have given the world something to think about." He continued "Everyone in the world has benefited from you being here and adding new things." The crowd roared as the four other team members joined Martin before them. Stacy stepped up with "We all need to offer something distinct, something that only you have to offer. Without it, the world will simmer and smolder on old ideas before finally burning out." Sam joined in "Please continue to give the world new fuel and may it spark other people to create." Claire added "And may their creations initiate your next one." Wainwright finished with "And may your next one be better than your last until you've created your greatest addition to the world." The crowd erupted and even the store manager smiled a little.

Following the team's advice, people continued to gather at Big Y to express their new ideas and behaviors each day. In turn, the simulated world was kept busy learning all their new things. There was little time for bad weather with all of the new ideas to process. In fact, there was little time for anything more than appreciation of the grand scale of being. People had purpose, to continually improve on the last thing - to be the originator of the next thing. Very few of the people understood the underlying risk of stagnation, but they all understood the happiness they felt from adding on. The people of the simulation believed they mattered and to the people of the simulation they did. For the remainder of the simulation, those people mattered as they added themselves to the equation and for the remainder of the simulation, the world solved for Y.