

Cognitive Systems—Bad. Reflexive Systems—Good.

June 2012 Newsletter

My client recently ran out of critical inventory in their warranty department for the third time in four months. As a result, not only couldn't they ship replacement parts to their consumers for several weeks, but they also had to airfreight in product from the factory in the Philippines. The airfreight cost them an additional \$4,000 each time.

On one occasion, the parts they ordered from the factory were held up in customs. On the other two occasions, they simply didn't order new stock from the factory in time, and they ran out. When I asked about this, Roger, the manager of the warranty department said, "I blew it. It's my fault."

He's wrong. It's not his fault.

It's the system's fault.

Inventory in the warranty department is currently managed with a "cognitive system." It should be managed with a "reflexive system."

Cognitive systems make you think

A cognitive system is one that requires a person to make a mindful, conscious decision about when and how to act in a given situation. In this case, Roger is required to *remember* to check on the shipping status of his inventory; he's required to *remember* to order new parts; and he's required to *calculate* how many parts to order—each and every time.

This subjects the company to the risk that he might incorrectly calculate how many parts he needs, or he might completely forget to place an order because he's so busy dealing with other issues. The system relies upon human discretion and memory to keep everything moving.

Reflexive systems tell you when to act

By contrast, a reflexive system is based on rules, and therefore doesn't require human judgment to keep work moving according to plan. It either uses flags or "trip-wires" to move work forward automatically, or relies upon a pre-set time or routine that causes a person to look for the flag. A simple example is a reorder card for office supplies. In a closet with boxes of printer ink cartridges, place a card on top of the last box with the reorder quantity: when the card is visible because all the other cartridges have been used, it signals to everyone that it's time to place an order for more ink. There's no need for anyone to think about when or how many boxes to order.

Cognitive → reflexive

Roger transformed his cognitive system into a reflexive system by using a calendar and a kanban card (a physical sign that tells people when it's time to perform a task). He put a large calendar on the wall that showed the order date, the expected ship date, expected customs arrival date, and expected delivery date. Now if he didn't get email confirmation from the logistics company on that date, he knew something was amiss. He also calculated his minimum inventory level (based on customer demand and lead time), and used a kanban card to trigger a reorder: just like in an office supply closet, when the card on top of the last box of parts appeared, he knew it was time to place a new order.

Simple. Easy. No thinking or remembering required, once the initial setup was finished.

Now, think about your average day: you're getting scores of emails, receiving a pile of action items at meetings, and you're delegating work. By definition, not all of this work can be done at once; most items have different deadlines and milestones, and they generally require follow up at different times. You're constantly forced to remember to make decisions about what to do and when to do it.

This is cognitive system hell.

The more you can transform your cognitive systems into reflexive ones—even if only partially—the more you can lighten your burden. Use calendars, kanbans, checklists, and auto-generated messages to help you make this transformation.

Not only will you avoid wasting money on unnecessary airfreight, you'll free up mental bandwidth to solve the big problems you should really attend to.

(Like this newsletter? Read my weekly blog post here: <http://goo.gl/2SXM9>)