

The Perils of Internal Disruption



THESE DAYS, if something is said to be ‘disruptive’, we assume that it is highly innovative and therefore good — although industry incumbents might disagree. But when it comes to an organization’s internal operations, disruption can be very

bad, both for the business and for employees.

Taiichi Ohno, one of the fathers of the **Toyota** production system, described three manufacturing ‘evils’ that every company should avoid: *mura* (unevenness), *muri* (overburden) and *muda* (waste). Not surprisingly, the three are interrelated: *unevenness* is often a cause of *overburden*, which leads to much of the *waste* that companies are so eager to eliminate.

Unevenness in any aspect of a business — customer demand, process time, quality of raw materials, staffing, etc. — results in overburdening some resources at the expense of others, or alternating between overburdening and underutilizing a resource over time. For example, the spike in toy demand at Christmas puts enormous pressure on factories, warehouses and logistics providers, to say nothing of front-line retail staff. Similarly, unevenness in machine availability will cause workers and machines in downstream processes to be alternately starved and overburdened with work.

The widespread quest for innovation across industries is only making matters worse: While pursuing industry disruption for a better share in their market, leaders are often oblivious to the disruptions that their personal actions and business practices are creating for their organizations. These

disruptions generate enormous unevenness for employees and processes, making it more difficult for the organization to excel.

Following are five types of internal disruption that can undermine a company’s performance.

MANAGEMENT BY WALKING AROUND. In their seminal book *In Search of Excellence*, **Tom Peters** and **Bob Waterman** popularized the concept of ‘management by walking around’ (MBWA), encouraging leaders to get out of their offices and randomly walk around the company to see firsthand what’s going on. They specifically advise managers to make their walks unpredictable, both in terms of where they go and when they go. Peters and Waterman believe that if front-line workers are expecting management’s visit, they won’t see what’s really happening on a regular basis. They argue that frontline staff will work differently; they’ll clean up their work area; they’ll cover up small problems. Leaders won’t get an accurate picture of how the processes are operating.

This kind of unpredictability can be a powerful form of disruption for the worker. If a senior leader randomly shows up, the workers will inevitably be anxious and stressed. They’ll work differently under the watchful eye of the boss, possibly creating variability in the quality of their work. Or worse — they’ll stop working while they answer questions, affecting the timing of a production line, and creating unevenness for downstream workers.

In contrast, organizations that have embraced lean thinking, like **JD Machine**, **Stanford Medical Centre** and

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Lantech, a substitute standardized ‘walks’ for random MBWA. At these places, the leadership team has a regularly scheduled walk through the various departments to see firsthand what’s happening. There are no surprises for the staff—they know who’s coming and when, with the result that these visits are smoothly integrated into daily work without disruption. Moreover, it’s both helpful and rewarding for front line staff to know that they’ll get to talk with the CEO or VP of Operations on a regular basis.

SALES INCENTIVES AND VOLUME DISCOUNTS. These practices create tremendous disruption in a company’s business by distorting both incoming market signals and outgoing orders to suppliers. Sales incentives — for example, bonuses to meet monthly or quarterly revenue goals — cause salespeople to stuff the company’s distribution channels with inventory far in excess of consumer demand. Volume discounts have the same effect, by encouraging customers to order more product than they need in order to get a larger discount. Both these practices wreak havoc on the supply chain through the “bullwhip effect.” **Hau Lee**, professor at the Stanford Graduate School of Business, illustrates this problem with a story about **Volvo**: in the mid-1990s, the Swedish car manufacturer found itself with excess inventory of green cars. The sales and marketing departments began offering special deals to clear out the inventory, but no one told the manufacturing department about the promotions. It read the increased sales as a sign that consumers had started to like green cars, and ramped up production.

The former president of **Wiremold**, **Art Byrne**, explains in his book *The Lean Turnaround* that he eliminated volume discounts and incentives for sales to book the largest possible orders. Instead, he pushed his sales team and his customers to provide a steady flow of small orders that would smooth demand and reduce disruptions. Large customers received cash rebates at the end of the year as a reward for their business, but without the supply-distorting incentives for large individual orders.

BATCH PROCESSING. It may be counterintuitive, but long production runs and large batches create disruptions in the flow of work compared to one-piece flow or small batch sizes.

During the batch there’s little disruption, of course. But at the changeover, everything and everyone stops to move machines, change out dies, put different raw materials in place, etc. And it’s not just an issue in manufacturing — large batches create disruption in office and administrative processes as well. Shutting down a warehouse for two days to do physical inventory, for example, is incredibly disruptive, with ripple effects throughout the business, from supplier to customer. Similarly, most finance departments in large companies cut their activities to a bare minimum during the month-end close of the books, which often can take up well over a week.

Toyota, most notably, has demonstrated the financial and quality benefits of one-piece flow over large batch processing in manufacturing. But working in smaller batches and avoiding disruption in office processes yields significant benefits as well. For example, many distribution centres use cycle counting to manage their inventory, avoiding the need to shut down the facility. **Boeing’s** finance department processes some of their financial information on a daily basis, rather than waiting to process a large batch at the end of the month. They look at what shipped each day, what materials were received every single day, and what bills were paid every single day. As a result of this (and other) changes, they reduced the time required to close the quarterly books from nearly one month to five days. In HR, too, many companies are getting rid of the annual performance review in favour of shorter, more frequent discussions as often as once per month. This not only provides more timely and effective feedback for employees, but it eliminates the massive time commitment imposed on managers in November and December.

KAIZEN EVENTS. What company wouldn’t want to reap the benefits of process improvements? Yet, kaizen events — in which employees in a given area stop their regular work for a full week in order to improve a given process — are the epitome of disruption. Kaizen events were invented by the original Japanese consultants who came from Japan to work with U.S. companies in the late 1980s. It made no sense for consultants traveling all the way from Japan to the United States to work with a company for just a half-day or a full

Unpredictability is a powerful form of disruption for employees.

day. Instead, the consultant stayed for a full five days. To be sure, the benefits are real (if often unsustainable). But kaizen events overload people in the week or two before the event by requiring them to produce extra in compensation for the upcoming downtime. Ironically, a weeklong event implicitly sends the signal that kaizen, which means ‘continuous improvement’ in Japanese, is actually discontinuous. (‘We’re doing improvement this week. Next week it’s back to business as usual.’)

Companies that realize the greatest benefits from lean thinking don’t do kaizen events. Rather, they make kaizen a daily activity. **Cambridge Engineering**, an HVAC manufacturer near St. Louis, for example, has explicitly carved out 30 minutes everyday for employees to do “lean and clean.” Other companies are less structured about it, but still benefit from embedding improvement efforts into the fabric of daily activities without disrupting the overall flow of work.

REACTING TO NOISE IN THE DATA. A final cause of internal disruption is management’s overreaction to ‘noise’ in the data it measures. Managers can now capture all kinds of metrics, from the number of patient falls in a hospital ward, to the first pass yield in a production line, to the number of hits on a website, to the time it takes to repair a bicycle. They cover walls with graphs and launch investigations when a number turns red or a trend turns downwards. However, not every change is meaningful. Too often, leaders react to every up and down in the metrics, asking for explanations and root causes that don’t actually exist. This kind of overreaction disrupts the organization and leads to activity that is more ‘busy’ than useful.

The fact is, some changes in metrics are just noise in an otherwise stable system. **Mark Graban**, in his book *Measures of Success*, makes a compelling argument for more use of Process Behaviour Charts (PBC) rather than bowling charts, bar graphs or a table of numbers. PBCs (also known as statistical process control charts) provide a holistic view of a system’s performance over time, allowing us to hear the ‘voice of the process’. This context enables management and frontline workers to determine whether a change is significant, indicating that something has fundamentally shifted in the system and is worth investigating.

As Graban writes, using PBCs prevents leaders from obsessing over every up and down in the data (no matter how insignificant), and instead leads them to ask, “What was different?” when there are actually meaningful signals in the data. The result is less disruptive overreaction and empty explanations (what Dr. **Don Wheeler** calls ‘writing fiction’) and more time spent on value-creating work.

In closing

Companies that create truly valuable disruptive products and services rightly reap outside economic rewards. However, the headlong pursuit of external market disruption can blind leaders to the existence — and the cost — of internal disruptions caused by their own business practices.

To be sure, some internal disruptions can be beneficial to a company and can significantly streamline processes. But when the disruptions lead to excessive unevenness in daily operations, they create distortions that stress employees, systems and supply chain networks. So, by all means, pursue disruption for competitive advantage. Just be careful not to disrupt yourself. **RM**

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