Barking up the Wrong Tree: Why Cost Cutting Is Not Waste Elimination

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Abstract

Operations managers frequently pursue waste elimination in the name of lean management. But a common mistake occurs when managers chase cost-cutting, whereas customers value non-cost operations capabilities – such as flexibility, speed, or quality. This can result in knee-jerk, short-term measures that run at counter purposes to long-term strategic interests. Managers can also get sidetracked from more salient opportunities when cost-cutting blinders steer them to low-hanging, but trivial fruit. In this paper we trace out examples of companies pursuing misplaced priorities, highlight the lessons learned, and present counter examples of waste elimination appropriately applied under a lean management framework.

A friend was bemoaning how inflation was putting an additional $50 dent in his weekly grocery budget. We commiserated with him as we talked on about inflation, the economy, the Ukraine war, supply chain disruptions, climate change, and so on. By the end of this somewhat dispiriting conversation, he expressed his resolve to slash his grocery bill to get better control over his household budget. Rising grocery costs are certainly no laughing matter, we mused, as we left him to his predicament.

Our friend recently relocated to the Northeast, and the empty nesters are "downsizing" to a 4,000 square-feet house in the 7-figure price range. Northeast winters being what they are, they are in the market for a couple of well-appointed, all-wheel drive luxury SUVs. Their high-stress lifestyles frequently lead them to seek respite in fine dining establishments and exotic vacations.

Are you thinking what we are thinking? Is a $50 spike in his grocery bill really the most pressing concern in his household budget? Or is he barking up the wrong tree?

The pursuit of false efficiency

A regional clinical laboratory touted timely and accurate test results as its competitive "selling" characteristic. Yet, it struggled to meet its promises; its production system was unable to compete on the turnaround speed of lab results. As its couriers hit the road to pick up lab specimens, their routes were set to keep assets highly utilized, that is, on the road and "efficient." As a result, the specimens were spending additional time traveling on the vehicles instead of being transported to the labs. When the couriers finally returned, all arrived at once, causing a huge volume surge and long queues. Consequently, turnaround times frequently exceeded performance targets.

In another instance, managers at a healthcare provider declared the importance of timely patient services and instituted ongoing efforts to that end. Simultaneously, they also rewarded high physician productivity, and encouraged physicians to delay documentation tasks until the end of their workday to save time by not switching between computer modules in the electronic medical record system (EMR). As a result, prescriptions and referral orders were routinely delayed until at least the end of the day. Further, with physicians placing greater reliance on memory, documentation quality was compromised and many medical procedures were not fully billable to insurers. Perhaps most insidious, the risk of errors due to memory lapses loomed.

As the above examples illustrate, managers are often caught between irreconcilable priorities. On the one hand, they must necessarily pursue efficiency. On the other hand, they must also watch that this pursuit does not detract from other attributes (such as timeliness or quality) that are important to customers.

Chasing the low hanging fruit

We have all noticed how the airline industry has been busy cutting meals, snacks, baggage allowances, legroom, headroom, and a plethora of other services.[1] Some readers may recall with nostalgia the days when airlines offered free meals. The 9/11 terrorist attacks in 2001 changed all that as security costs for food-and-beverage carts alone skyrocketed. American Airlines, for example, spent an additional $30 million by mid-2002 itself.[2] Pummeled by a traffic slump, and eyeing lower costs and quicker turnaround times, most airlines cut food service.[3]

Amid industry-wide bankruptcies, the landscape took another turn in 2003 as America West Airlines introduced onboard food sales.[4] American Airlines joined the trend to save $30 million annually.[5] United reduced spending from $100 million to $20 million annually, while bringing in an additional $20 million in revenue.[6] Continental, the last to join, saved $35 million annually.[7] Substantial savings, indeed, even by airline standards. Once savored, the airlines were loath to relinquish these savings even after the industry bounced back, so free meals continued the way of the dinosaur.

But cost-cutting did not stop there. By 2005 it cast its shadow on free snacks too. Facing a $450 million first quarter loss, Northwest cut free pretzels to save $2 million annually.[8] Facing a loss of over $500 million,[9] US Airways cut free pretzels to save $1 million annually.[10] By 2011 even Continental, the last big airline to ax free meals, adopted its merger-partner United's "lowest common denominator" to ax free snacks and save $2.5 million annually.[11] Ironically, some so-called discount airlines like Southwest and JetBlue continued to offer free snacks.[12]

Admittedly, cutting snacks was not as lucrative as cutting meals, but legend has it that "in 1987, American Airlines famously cut one olive out of each salad and saved $40,000 each year."[13] Savings of $1 to $2.5 million are nothing to scoff at. Every little bit counts.

Or does it? Consider that $2 million represented only 0.018 percent of Northwest's $11 billion operating costs,[14] $1 million represented 0.020 percent of US Airways' $5 billion operating costs,[15] and $2.5 million represented 0.011 percent of United Continental's $22 billion operating costs.[16]

The airlines failed to recognize that when managers start chasing the little things, strategic priorities are bound to get skewed. Consider how they recalibrated their valuation of food service, which is often acknowledged to be an important "window to the brand" since passengers primarily experience the brand after boarding the aircraft.[17] Many surveys also ranked food service highly.[18] Yet, when American Airlines cut free meals, a spokesperson pointed to discount airlines to rationalize that "the customer doesn't value the food."[19] Likewise, US Airways said cutting free pretzels was part of a "larger effort to compete with low-fare airlines."[20]

It's true most passengers are "bargain-sensitive travelers," over 87% in American's case.[21] But should a full-service airline set its strategic priorities to imitate discount airlines? Is that the appropriate comparison frame? Not surprisingly, accused of "nickel and diming," the major airlines did not even rank in the top 10 in a Zagat survey; the lowest scores were related to food service.[22]

Misplaced priorities

On many college campuses one can find students shuffling about in strategically torn $200 jeans and $300 sneakers, toting $200 backpacks stuffed with $1,500 laptops, sipping $6 lattes as they browse their $1,000 smartphones, scrounging cash for happy hour beer. But, alas, they are unable to afford textbooks! Amusing as the above stereotype sounds, oftentimes managers can be seen pursuing similarly ill-chosen priorities.

Cost-cutting is certainly important, but not when it erodes performance on strategic priorities. In their report on airline customer loyalty, a Deloitte executive said, "Many executives tell me how important loyalty is to their businesses, but few say they have cracked the code."[23] Their advice? "Common sense examples" such as "show the customer that you care" and "stop nickel and diming." Ironically, with the major airlines imitating discount airlines, leisure travelers exhibited more loyalty than the highly coveted high-frequency business travelers. Whereas leisure travelers flew over 75% of their travel miles on a single, preferred airline, 72% of business travelers patronized two or more airlines, and over a third patronized four or more. What a stark example of misplaced priorities!

Porter[24] stressed the importance of deploying strategic priorities to create a unique position that is difficult for competitors to replicate. Faced with a laundry-list of customer requirements, managers must carefully choose the most salient requirements, then select the appropriate capabilities to deliver on those requirements. For example, two vastly different strategies – differentiation versus cost-leadership – will require the development of vastly different capabilities. Skinner[25] echoed this notion in the context of operations capabilities – namely, cost, quality, time, and flexibility. He argued that "tradeoffs are inevitable; one system cannot be outstanding enough at meeting all criteria to create competitive advantage" (p. 6). Although capabilities can sometimes be complementary – for example, improving quality might simultaneously lower costs – oftentimes prioritization means also recognizing what must be sacrificed as less important.

Yet, a frequent misstep by managers is to pursue unfocused, "all of the above" strategies. In our MBA classrooms, we often marvel at how even seasoned managers struggle to internalize the notion of tradeoffs. The concept in theory elicits nods of agreement, but real-world application unearths the real challenge – deciding what to let go. Can you imagine managers admitting "low cost is not so important, so it can be sacrificed"? Or likewise can quality, time, or flexibility be easily sacrificed? Not easily, but often necessarily.

In this context, it is particularly useful to distinguish the order winners, i.e., "factors with which a company provides a distinctive competitive advantage," from the order qualifiers, i.e., "factors that … will not win orders, but failing to achieve [which] will eliminate a company from being considered."[26] While order winning priorities demand uncompromised excellence, order qualifiers must largely meet competitive thresholds. Low cost is rarely the undefeated order winner. An undue emphasis on cost-cutting will certainly compromise non-cost priorities – quality, time, flexibility – which are often the ones most sought by customers. For example, Schonberger and Brown[27] soundly criticized managers for their narrow focus on efficiency, which eroded the responsiveness that customers desired.

Does that mean managers should pursue cost savings only when low cost is the order winner? Emphatically, no. Perpetual pursuit of efficiencies is a given as competitive environments constantly upgrade customer expectations. However, it is imperative that cost-cutting not impinge on order winning non-cost priorities. Managers need to recognize the fine line between *cost-effectively* pursuing non-cost priorities versus *elevating low cost* itself to a higher priority.

It is also easy to misjudge the tradeoffs between cost and non-cost priorities. Cost-cutting often spawns deleterious effects that are intangible, or only reveal themselves over time. Meanwhile, reward systems frequently encourage immediate, tangible cost savings, which can lead to a systematic tilting of the scales in favor of low cost. Consider how, whenever hard times struck, full-service airlines became motivated to emulate discount airlines and discard their order winning non-cost priorities. Notably, even stalwarts like Toyota have floundered. Recalling millions of cars for stuck accelerators, Mr. Toyoda admitted before Congress, "Toyota's priority has traditionally been: First, safety. Second, quality. And third, volume. These priorities became confused."[28]

Picking your battles

Many cost-cutting opportunities present themselves as low hanging fruit ready for picking. Yet, some fruit really should not be picked lest they skew the strategic priorities, such as full-service airlines cutting snacks to save $1 to $2.5 million. Not only are such savings literally "peanuts" in an airline's budget but pursuing them creates busy work that distracts managers from more salient opportunities.

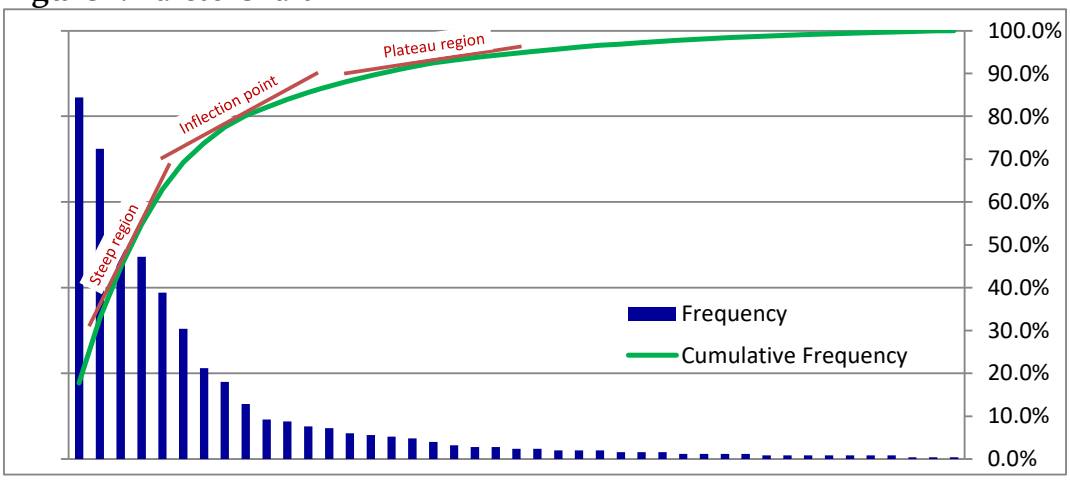
What are some salient opportunities that airline managers might have pursued instead? How about 25 to 50 percent productivity improvements in the maintenance shop?[29] Or 30 to 50 percent improvements in turnaround times for "engines worth $20 million languish[ing] on 40-day journeys

through overhaul lines"? Or improved utilization of aircraft and expensive infrastructure, "which often falls below 50 percent"? Or 20 to 40 percent reductions in flight turnaround times for "aircraft worth $100 million or more [that] routinely sit idle at gates"? When you consider that "45 percent of an airline's cost structure consists of maintenance, ground handling, in-flight services, call centers, and aircraft acquisitions," tremendous benefits can accrue from even small improvements in these areas.

Little wonder, then, that "an airline that fully embraced lean operations could slash its overall costs by a further 5 to 10 percent."[30] In other words, while Northwest cut free pretzels to save $2 million, embracing lean operations might have saved $1.1 billion of its $11 billion operating costs. Likewise, US Airways' $5 billion operating costs might have yielded $0.5 billion, and United Continental's $22 billion operating costs might have yielded $2.2 billion. Yet, it is inherently more tempting to gather easy pickings in the "peanut" category than to strive for larger savings in the "potential" category. Not surprisingly, "wasteful processes abound at many supposedly lean airlines."[31]

Lean management is recognized for its relentless pursuit of waste elimination. It identifies eight types of waste (muda in Japanese), seven captured by the acronym TIMWOOD – Transport, Inventory, Motion, Waiting, Overproduction, Overprocessing, and Defects – and an important eighth, underutilized employee potential. Certainly, lean management is about eliminating all forms of waste, big and small. But managerial time and energy are limited resources, so where should they be focused first? A widely recognized tool in the lean management arsenal is a Pareto chart (Figure 1). This chart helps identify the most important factors by demarcating (i) a steep region where each factor contributes significantly to the total occurrence, (ii) a plateau region where each factor contributes only marginally, and (iii) an inflection point of transition between the two regions.

Figure 1. Pareto Chart



As we can see from the Pareto chart, the factors within the steep region provide the greatest "bang for the buck," constituting the vital few factors (typically 20%) that account for the vast majority of occurrences (typically 80%). Applications of this principle are as varied as they are interesting. A hospital pharmacy found that just two departments (of five) administered over 80 percent of a certain expensive drug, suggesting a need for inventory centralization.[32] A warehouse providing third-party logistics services found that just five activities (of 24) accounted for over 80 percent of time, and identified solutions to reduce delays.[33] A bank experiencing frequent phone queries from branch offices targeted the top three reasons (of 17).[34] An audit of medication errors identified four categories (of 12) as the vital few "that warrant the most attention."[35] In a hotel supply chain, the top three issues (of 19) were identified as most relevant for targeting.[36]

When we view airline cost-cutting from this perspective, the potential to save $0.5 to $2.2 billion by embracing lean management clearly stands tall in the steep region. In contrast, savings in the $1 to $2.5 million range, such as through cutting free pretzels, are dime-a-dozen in the plateau region. Indeed, a Pareto lens shows that the vital factors in the steep region dwarf even the considerably larger savings from the elimination of free meals ($20 million to $30 million, or under 1.5 to 2 percent of costs), which seem inconsequential when you consider that American's ambitious goal was to cut $4 billion.[37]

Embracing lean management

Is cost-cutting not waste elimination? Not necessarily. Waste elimination is a long-term process "for increasing value as customers define it."[38] It generates inimitable competencies that "are more likely to be truly differentiating and sustainable than those resulting from more imitable

tactics, such as [airlines] extracting wage concessions or cutting service."[39] Often, however, managers mistakenly grasp at any and all cost-cutting measures without stopping to consider whether that's truly waste elimination.

Local optimization = penny wise pound foolish

Waste elimination eschews local optimization and instead emphasizes a system-wide perspective. Consider the example of the clinical laboratory mentioned earlier. Instead of pursuing high asset utilization, adding more couriers and cleverly reconstructing routes with mechanisms to handoff specimens could promote quicker delivery of specimens and timely delivery of results. Clearly, quick delivery was their primary driver of success, but cost-cutting was compromising that order winner.

In another example, a major healthcare provider engaged in "hardball" negotiations with suppliers for clinical items, negotiated lower prices using buying leverage, or switched to alternative suppliers. Unfortunately, managers overlooked the resulting additional costs – lower quality supplies led to more product wastage, and employees padded purchase quantities to compensate for poor yield. Local optimization clearly backfired.

Kaplan and Haas[40] also lamented a similarly narrow focus on procurement prices among healthcare providers. At 25 to 30 percent of total costs, purchased materials and services presented a juicy target for waste elimination. However, focused solely on prices, managers ignored other salient factors such as large variations – by a factor of 10 – in the usage patterns of individual clinicians, thus "miss[ing] potentially large opportunities to lower spending."

In another example, a healthcare organization faced patient complaints regarding inadequate waiting room facilities. Managers were convinced the solution was to spend over $1 million to remodel the waiting room. But no one stopped to consider what process bottlenecks caused patients to wait in the first place. Managers were also inclined to invest in check-in kiosks, an exciting new gadget. But they did not consider whether reducing check-in time might simply move patients to another queue at a downstream step.

A related principle in waste elimination is to trace the root cause, not chase the symptom. Without first identifying the bottlenecks, managers would only be patching symptoms. But the same managers who were ready to spend over $1 million on remodeling were not keen to take on the heavier lift of analyzing deeper. Moreover, gadgets like check-in kiosks seemed more exciting than relieving bottlenecks by adding clinical and support staff, providing training, or updating systems.

As the above examples illustrate, pursuing easy pickings of conveniently available cost-cutting opportunities is not the same as embracing lean operations. Indeed, such "penny wise pound foolish" actions can result in the very opposite of waste elimination.

So, what does it take to fully embrace waste elimination under lean management?

Continuous flow processing and the value stream

The origins of lean management can be traced to Taiichi Ohno, the Toyota Production System (TPS) and Just-in-Time (JIT) inventory systems.[41] Larger batch sizes, in production or in conveyance, result in larger inventories, which then translate into longer turnaround times (or waiting) since an item (or customer) cannot proceed to the next step until the entire batch is processed. Therefore, lean management emphasizes smaller batches, ideally a "batch size of one."

Batch processes are commonly found across many industries. Consider the earlier example of physicians batching documentation tasks until the end of the workday, which resulted in prolonged response times, documentation errors, and unbillable insurance claims. Batching can also occur when physicians book certain appointment types on certain days of the week. This batching may be driven by medical rationale, such as pediatricians scheduling well-baby visits in a specific time block to prevent the spread of disease from sick babies. Or a certain specialist may need to travel to different locations on different days. At other times, batching is pursued for improving physicians' efficiency, or even convenience. No matter what the reason, batching will invariably increase turnaround time.

Contrast that with the lean management approach in healthcare described by Gesensway.[42] To eliminate batching, physicians adopt a "one-piece flow" and "avoid touching a patient's chart three or four times a day." They initially review patient charts briefly to prioritize them into four categories by urgency. Later, when attending to "each patient, they spend as long as they need in talking to nurses (ideally, at the bedside), calling consultants, and doing all the orders, documentation and billing on a "computer on wheels" (COW) workstation. Only when they are done do they move onto the next patient." Importantly, it is not okay "to have a stack of charts on their desk to complete at 9 at night … trying to document an exam 12 hours later [when they] are tired."

Some processes, such as "the handling of paper checks and credit-card slips" in a bank, "[lend themselves] readily to lean manufacturing techniques, … and their impact can be dramatic: the faster a bank moves checks through its system, the sooner it can collect its funds."[43] Other settings may require a

little more creativity. For example, a clinical laboratory experienced wide variation as "pathologists demanded large batch workloads."[44] The laboratory "used load leveling and batch-size reduction, and smoothed the daily setup times … [reducing] turnaround time by 5 to 8 hours." Further, it switched from a single shift ending at 5 pm to three shifts, preventing specimens being batched overnight. Likewise, another laboratory that switched from batching specimens to continuous flow installed "work benches with multiple adaptations to achieve a balanced workload," which also increased efficiency.[45] In another example, a healthcare provider deployed medical assistants as "flow managers" to implement a "one-piece flow."[46]

The lean methodology often employs value stream mapping. At the Virginia Mason Institute, for example, this visual depiction is done "from the patient's – or customer's – view."[47] Not only does mapping help "see waste and direct [the] improvement efforts," but it also helps people "see across functional boundaries" so "they're working together like musicians in a symphony." In another clinic, teams mapped out the work flow of a patient visit to "identify wait times, do a root cause analysis, develop countermeasures and then quickly reassess with data."[48] As a result, the clinic's metrics moved "from last to first place in its 22-clinic organization."

Another important application of lean management is the use of U-shaped cells to facilitate continuous flow processing. Weber[49] gives an example of arranging the "wall cubbies outside each physician's office door" to "facilitate a step-by-step pattern of tasks each doctor is supposed to execute immediately upon emerging from a patient visit." Doctors' offices "occupy the center space" so they are only "a stride or two away from the patient rooms," nurse's office, and intake counselor's desk.[50] In an interesting nod to customer focus, patient rooms now get the "windowed outer walls."

Work standardization

Another important lean management principle is to standardize work and reduce variability. Wide variation presented an issue at a clinical laboratory – pathologists expected different tolerances for slide preparation; staff had diverse skill sets.[51] Recognizing the importance of standardization, the laboratory developed hiring standards, implemented "task-specific competency evaluations," and cross-trained all the staff. It also developed a "rapid culture method to standardize the work and reduce waste in the form of setup time and unnecessary motion."

Standardization "requires an organization to search for order in the demand patterns."[52] In an airline maintenance shop, only a third of the activities were nonroutine, a quarter of which were related to wing

maintenance, which itself largely involved only four areas.[53] This analysis enabled "standard tasks and workplace designs" whereby "mechanics became surgeons, with all their equipment and tooling arranged carefully ahead of time and reliable procedures in place to deal with surprises."[54] Visual floor marks identified spots for the planes, equipment, and workers. Standardization enabled more stable schedules. Task status boards enabled real-time visual communication.

Other examples include a restaurant sandwich preparation process dogged by unpredictable demand and long wait times.[55] Standardizing the procedures cut the number of steps from 13 to 5, rationalized the transportation, reduced service time by one-third, and cut labor costs by 15 percent. Even settings with high unpredictability, such as hospitals, might have "far fewer discrete stages to worry about than do major manufacturers, [and] can often reduce their variability a good deal."[56] Kaplan and Haas[57] blamed "high variation in clinical practices" on "failing to benchmark and standardize." Sinsky et al.[58] noted how "primary care visits are often disorganized and rushed." Yet, implementing "pre-visit planning and pre-visit laboratory tests" reduced the volume of work, saved over an hour of time, while also improving care.

Although "lean strives for 'standard work' … it also recognizes the value of flexibility."[59] For example, while lean airlines routinely employ a standard aircraft turnaround process, for delayed flights they initiate a "power" turnaround process. In many processes the variety of tasks makes "it difficult … to meet the promised service levels."[60] Such variability can be "tamed" by grouping activities into sets and assigning them to "baseload" teams, with a small "swing" team to handle demand swings.

Adding value, not just cutting costs

In many instances a careful evaluation of "work" versus "waste" can lead to increasing, not reducing, costs – to increase the value added. For example, support staff are often viewed as non-revenue generating payroll, therefore easy to cull. Yet, they enable the leveraging of expensive personnel by freeing them of lower-skilled tasks. At a healthcare provider, for example, when support staff were reduced to cut costs, doctors ended up spending much more time on paperwork.[61] Sinsky et al.[62] similarly reported how primary care physicians spend "much of their days performing functions that do not require their professional training." Instead, a nurse or medical assistant can filter and pass "only that information which specifically requires a physician's level of expertise."[63] In other instances, waste elimination might even call for adding expensive personnel. For example, rounding out a clinical care team to provide the best coordinated care often needs the addition of medical

assistants, registered nurses, health coaches, clinical pharmacists, behavioralists, nutritionists, and so on.

Another area for investment is infrastructure. Consider a grocery store with several checkout lanes, but only a few of them staffed. The empty lanes will amply pay for themselves during demand surges. Often, "idle space and equipment are much less expensive than idle [personnel]."[64] Instead of a surgeon waiting between surgeries for an operating room to be prepped, investing in multiple rooms allows prepping in advance without delaying the surgeon. This principle of adding infrastructure to facilitate quick changeovers is exemplified when a race car enters a pit stop. The additional equipment, personnel, and pre-prepared tasks minimize the car's downtime by converting as many changeover tasks as possible to "external setup," that is, tasks completed before actually stopping the process, thereby reducing the remaining "internal setup" to the bare minimum.

Fully utilizing employee potential

Have you noticed how "the first port of call in a cost-cutting exercise is often the payroll"?[65] Yet, "it's in the trenches that lean efforts succeed or fail."[66] Somehow, managers are frequently oblivious to how this contributes to the waste of underutilized employee potential.

A vintage Harvard case study described a diesel engine plant that introduced participatory management initiatives back in the 1970s.[67] The case represented a poster child for high commitment high performance (HCHP) organizations.[68] In a few short years, the participatory environment produced spectacular improvements not only in employee morale, but also large year-over-year productivity improvements, quality rejects at 25 percent of a sister plant's, machine utilization of 60-70 percent versus 50 percent, absenteeism of 3 percent versus 6 percent, and so on.[69] Some years into the initiative, orders were down 18 percent in the face of an economic downturn, so the manager was pondering cost-cutting measures. One option was to lay off up to 4 percent of the workforce. However, the manager was concerned that layoffs might damage the rich participatory environment the plant had carefully nurtured.

Even a cursory examination of the brief case facts presented above is sure to give pause to any quick fix solution that might jeopardize employee commitment. After all, the participatory environment was generating tremendous dividends, both tangible and intangible. Why jeopardize all that for a one-time 4 percent cut in labor costs? Why kill the goose that is laying golden eggs?

Surprisingly, it is not uncommon to see examples of exactly such behavior. Any resource that can be acquired or disposed of at short notice is

really a commodity. But why are human resources commodity-like? As Beer[70] cautioned, "it is relatively easy to buy talent, but much harder to achieve organizational performance that is greater than the sum of talented recruits without social capital." The more successfully managers can integrate employees into the system, the greater the value those employees add, which means the greater will be the corresponding loss if those employees depart. Conversely, if managers have added little value beyond simply bringing employees in the door, they will fail to derive value from them, and can also readily dispose of them.

Little wonder then that "HCHP companies believe in hiring for the long term – even for life. They see the development of people who fit the culture as an investment they do not plan to liquidate unless absolutely forced by circumstances."[71] Such human resource practices are also enshrined in lean management principles. Embracing Toyota-style lean management, the Virgina Mason Medical Center adopted a no-layoff policy "to alleviate fear that a labor-saving idea might result in the loss of one's own job."[72]

Although HCHP companies are held up as role models, every company necessarily makes enormous investments in human resources. Value statements boast, "our employees are our most valuable assets." Ironically, as soon as the cost-cutting bug bites, managers get drawn to cutting *tangible* costs even if that means squandering this frequently underestimated *intangible* investment.

A parallel error to underestimating human resources is to overestimate the cost savings from labor reductions. Labor's share of total cost has been steadily shrinking across many industries. In the above Harvard case study, for example, labor represented only a small portion of the product cost, so cutting labor would have produced only a small impact on total costs. In contrast, an immediate downside would have certainly been the cessation of the large year-over-year productivity improvements that employees were generating. Many companies are also recognizing that outside supply chain partners command an increasingly larger share of the total product cost – often upwards of 70 percent. Thus, managers stand to gain more from supply chain innovations than by killing the proverbial golden goose of human resources.

Conclusion

Managers are frequently drawn to cost-cutting in its various forms. Waste elimination being a key aspect of lean management, controlling costs can indeed be a valuable endeavor. However, managers need to be vigilant in maintaining the fine line between cost-effectiveness on the one hand, and cost-focus on the other. *Cost-effectiveness* implies that managers are acting

in consonance with the company's order-winning, non-cost priorities, while at the same time being careful with the purse. In contrast, a *cost-focus* suggests a recalibration of priorities, often quite unintentional, whereby low cost commandeers the driver's seat and non-cost priorities get relegated to the back seat. When the dollar sign starts flashing before the eyes, operations priorities get misdirected, and managerial actions become incongruent with the company's strategic priorities. True adherence to lean management principles can help managers avoid the pitfalls identified in this article. When waste elimination is conducted under a strategic lean management framework driven by customer focus, cost-cutting will align neatly with strategic priorities.

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