

Chapter 4

Productivity

The only way we create new wealth is by becoming more productive. Tor Dahl insists, “There is no other way. None. Zero.”

In chapter 1, we articulated the change in household and government debt since 1973. It was the acceleration of these figures in contrast to the rate of wage increases that led to the financial crisis. Another point highlighted was that between 1973 and 1995 productivity dropped so far as to be less than it was before the Industrial Revolution.

If productivity had increased at 5 percent every year since 1973, the U.S. GDP would have been \$44 trillion instead of the \$14 trillion recorded at the end of 2008. Per capita income would be \$156,000 instead of the observed \$46,000. Tor suggests there would have been no federal deficit and no problem in funding Social Security, Medicare, or Medicaid.

The economy would have witnessed full employment, high and rising wages, and high and rising profits along with stable or falling prices—quite an accomplishment for a mere 5 percent productivity improvement. So what went wrong? Why did productivity fall? Why have we only managed 2 percent since?

To answer that question, Tor points to the quality revolution—specifically to the work of William Edwards Deming and Japan’s adoption of his methods in the 1950s. Improved quality led to increased consumer satisfaction and, ultimately, lower costs for manufacturers. With a twenty-plus-year head start on America, Japan created an economy where they took out all the waste, then delivered the highest quality cars, televisions, and computer chips the world had seen. By 1973 Detroit could no longer compete. When Ford manufactured a car model with transmissions made in both Japan and the United States, consumers waited for the Japanese version. While the overall specifications were the same, the tolerances were remarkably different. The tolerance (or variation) on the Japanese version was lower.

This led to smoother performance and fewer defects throughout the life of the transmission.

During the 1970s, America switched its focus to improving quality to remain competitive. Ford's slogan became "Quality Is Job One," and they began to regain consumer confidence. To achieve this, Ford adopted a policy Tor refers to as "freezing" variation. The unintended consequence of the policy, however, is that productivity improvement falls to zero when you can't improve quality further. Sooner or later everyone becomes a "me too," as competitors catch up. When that happens you face a price war.

Before we go any further, let's take a moment to define productivity. It's a measure of output over input, results over resources consumed.

For the American car manufacturers, output had remained relatively constant (sales revenue), but the cost of catching up (the input) temporarily rose, leading to negative productivity growth. Over time, as consumers moved back to American cars, the scales tipped. Those initial "retooling" investments began to result in significant cost savings through reduced scrap, downtime, and errors. Combined with increased revenue, productivity increased. Once America caught up, however, it became difficult to seek out further efficiencies. At that point, productivity leveled off with little, if any, growth year after year.

Six Sigma management strategy provided a second wave of "quality" savings in the mid- to late 1990s, but again, once an organization achieved 3.4 defects per million parts, there was little else to be gained. Productivity growth plateaued and fell to zero. As everyone else achieved the same, businesses were left with pricing pressure which in turn reduced margin and profit. The negative spiral continues today.

The only way to ignite productivity growth and break out of that spiral is to create significant competitive differentiation, differentiation that grows market share (a topic I'll discuss in chapter 6). Quality alone produces diminishing returns; everyone becomes a "me too." Something else has to change, something that can increase demand and kick-start growth—innovation.

To create innovation and differentiation, organizations have to "unfreeze" variation in an attempt to discover or create something radically different.

Ironically, organizations following quality tenets tend to focus on simultaneously reducing costs while improving quality. They seek an optimal balance for a lean environment. As mentioned numerous times already, everything can have unintended consequences. With fewer staff producing increased volumes, there is little if any time to get creative or experiment.

The same is true of finance departments. The common complaint is that they don't have time to get more strategic; they are too focused on closing the books or getting the budget done. They invest in software that helps them become more efficient. Why? Because it's easy to justify the return on investment through time and cost savings. They get the job done faster and with greater accuracy. But the trend of late has not been to use that time to get more strategic—they cut headcount to save even more money. Those few that remain still have little time to innovate and get strategic.

Martha Rogers has another good point here: You can't schedule when you are going to come up with a great idea or innovation; it's not something you do at 3 p.m. on Wednesdays and Fridays. If you have optimized out all thinking time, it will never happen. Or if it does, it will become too hard to fit into the "optimized" day job. Worse, the mantra of quality, "reduce variation," actively discourages people from stepping outside the box in the first place.

Your organization may have a research and development group, an innovation hot house, but as both Tor and Joel would contend, every employee in your organization has experience and knowledge—now more than any time in history. They have the capacity to introduce great ideas; why not leverage them? This is where we will focus: How to create more time for innovation while constantly improving the productivity of every man, woman, and child.

Before we get into the details of "how," let me share a story from Tor that should give everyone hope, a story of Silicon Valley. There, they have mastered the art of unfreezing, then freezing, repeating the cycle every eighteen to twenty-four months. Back in 1965 Gordon E. Moore, co-founder of Intel, observed that the capacity for computer chips could double every two years. Since then, "Moore's Law" has been proven right. Many believe this phenomenal growth will continue for another decade and perhaps even longer. The interesting lesson here is this: When you increase productivity

by 100 percent, by the time you reach your goal, you cannot double it again using the same technology. You have to innovate and try a new approach. For Silicon Valley that has translated into an average productivity improvement of 12.85 percent per year for the last twenty years. During the same period, the U.S. economy witnessed a mere 0.9 percent growth per year. Along with that 12.85 percent growth came a 7 percent decrease in price every year, which in turn increased demand, pushing sales higher and higher. Real wages in that sector rose by 5.67 percent per year—the highest in the economy. For fifteen of those twenty years, investors made a 9.8 percent per year return.

Tor insists that everyone can do what Silicon Valley does. It doesn't matter whether you are making computers, hay, textiles, or whatever—the principles for improvement are the same.

We are an 80 percent knowledge economy. The more knowledge you have, the more you can contribute. That's what productivity improvement is about. China recognizes this. Since 1989 it has focused on productivity improvement, averaging 10 percent growth per year. Tor suggests that China will overtake America within ten years unless America learns the principles of adding value. An important element of improvement is education. In chapter 1, we noted that a person achieving the highest levels of academia can earn over \$1 million more during his or her lifetime. One of China's goals is to have more English-speaking Chinese citizens by 2030 than the rest of the English-speaking people in the world put together. Think about that. If China is teaching everyone the secrets of productivity and improving education, given their population, how will you compete?

One thing is certain. It won't be by doing what you are doing today. It won't be by improving quality. Quality will have its place, but you will have to innovate—not just one part of your organization—everywhere. Not as a one off, but constantly. As Geoff Moore reminds us in chapter 7, all great innovations have their period of glory. Competitors catch up. Margins fall. And the only way to compensate is to create a conveyor belt that delivers a constant stream of innovations. Just like Silicon Valley: Unfreeze, then freeze, then repeat the process ad infinitum.

The thing to remember is that you cannot guarantee which innovation will deliver the differentiated (monopoly advantage) you seek. You cannot put all your eggs into one basket. You have to be prepared for failure and create

a culture that embraces it, learns from the errors, and moves on. You have to create time to explore the possibilities without destroying current cash cows or core parts of your organization.

Improving productivity

Interestingly, while innovation can be hit or miss, improving productivity is consistent and something that can be taught easily. Tor has helped more than 400 organizations improve productivity by a minimum of 300 percent. He claims a 100:1 return on investment for his clients.

The process starts by looking at the knowledge we all develop. The average American has improved productivity by 2 percent per year for the last 130 years. By the time they have worked thirty years, they are 81 percent more productive. When that person leaves a company, so too does the knowledge. What if you could start with 81 percent and then improve by 2 percent per year? That would make a person 221 percent more productive over his lifetime. But Tor isn't content with that figure. He asks "What if you started with 10,000 years of experience?"

Tor refers to Malcolm Gladwell's book *Outliers*.¹ In his book Gladwell introduces something that shocked most people. He believes that people who excel at the highest level at something all have the same thing in common. They've spent 10,000 hours rehearsing what they eventually mastered. For Mozart it was music, for others athletics, teaching, or whatever. What is experience if it isn't knowledge? It's not 100 percent the same, but in Tor's eyes, it's a great proxy.

You probably won't find that level of knowledge in a single person. But, collectively, if you were to tap into the knowledge of everyone within your organization and leverage lessons learned from others, you'd get very close.

As with Joel Barker's Implications Wheel[®], you'll probably find a bunch of experts. When you ask around, you find that everyone knows who has the most experience up and down the organization. They are the people you talk to first. They will give you the most focused insights. But if you were to leave it at that, the rest of the organization wouldn't buy into the initiative. Just as in the case of the NASA Implications Wheel[®], you'd probably miss out on some excellent insights from the people whom you'd least expect them from—so you involve the entire organization—you leverage

the wisdom of crowds and in the process share knowledge with everyone, lifting everyone's productivity.

Productivity improvement frees and reallocates resources by looking at occupancy, effectiveness, and efficiency.

Occupancy relates to the amount of time you spend working versus waiting for work. This is something you can act on immediately; you can always replace waiting time with something more productive. If you are in a meeting that doesn't start on time, use that time to catch up on e-mail or reading.

Effectiveness has to do with whether you are doing the right things. It is a strategic consideration that breaks down into three areas:

- Screening: What am I doing that no one in this organization should be doing?
- Delegation: What am I doing that should be done by someone else?
- Planning: What should I do, in what order, by when?

Efficiency ensures you are doing things right. But it doesn't really matter unless first you are effective, so that you are doing the right things right.

Leadership style also has a major impact on productivity. There are four basic styles of leadership. Tor talks about the Charismatic leader, the Monastic leader, the Bully leader, and the Bureaucratic leader. No one wants to work for a bully, and the bureaucrat makes everyone feel powerless. These concepts are not new. Greek philosophers identified the four styles over 2,400 years ago, calling them the Greek Tempers. Correct the Bully and Bureaucratic styles of leadership and expect productivity to go up by as much as 20 times. But how many organizations act on this knowledge? It's always possible to change—it's not easy, but it's possible.

When Tor and his clients explore that knowledge, he is looking for what he calls "logjams"—things that stand between you and your fondest dreams. Remove those barriers and you create more time for innovation. In fact, Tor's experience suggests that only 8 percent of what is done today is perfect. That means 92 percent can be improved. Surprisingly, the "logs" that will be uncovered fall into twenty-three categories. These can be considered the DNA of unproductive behavior. As an aside, human DNA has twenty-three chromosomes. Perhaps twenty-three is the magic number! In Tor's thirty years of experience, he hasn't uncovered another category.

Here are two interesting facts: First, “no two logjams will be the same.” Second, “an organization will typically have no more than five to seven logs in its logjam.”

Just like a doctor with a patient exhibiting multiple symptoms, you search for the root causes, make the diagnoses, then put together a treatment plan that takes all of the relevant findings into consideration. Only then can you go about fixing the problem. There is no silver bullet or shortcut, no one-size-fits-all diagnosis; it’s an interactive diagnosis.

If it becomes obvious during the diagnostic process that one of those logs is more critical than the others, you deal with them in priority order. If you apply the concepts of Activity-Based Management mentioned earlier, you can also assign an accurate value to each log, increasing the chances of its getting attention and action.

What you will find is that each log has at its root a bad idea. Your employees have the wisdom to re-engineer or replace those ideas with good ones, which increases productivity. Everyone hates being unproductive; two-thirds of stress and employee dissatisfaction comes from being unproductive. Help them become productive, and they will exceed your expectations. Remove the “logs” and expect a happier, healthier workforce. If there is any magic, it is this.

The good news is results can build fast.

One of the worst sectors for productivity is health care. For the last thirty years, health care has experienced negative productivity in the United States. Tor helped the fifth-largest clinic in America. Physicians became 1 percent more productive—every month. They developed the largest surplus of any clinic in the country. That state’s governor called them each year to remind them that they were a nonprofit organization. Tor has applied these concepts everywhere he has thought they would fail—with researchers, academics, nuns, schools, and even nations. All have benefited.

Improved productivity does NOT mean laying off staff

This is perhaps the biggest fallacy about productivity. Many think that because somebody becomes more productive, others will suffer and perhaps lose their jobs. Tor likened the situation to a football team. When a quarterback is four times as productive as any other quarterback, you don’t

reduce the team's size. You take more ground and everyone benefits. There are no layoffs.

If I look back on my own career in banking, I see the same has been true. When I first discovered how to use a computer in the late 1980s, I began to automate all the things I found boring. I wanted to create more time to focus on new ideas that would help us achieve greater insight. Technology helped; it was fun. At the time, I was working in a team of nine. We analyzed sales results, set targets for branches and dedicated sales staff. Those simple achievements enabled us to improve productivity so that six people were able to refocus and build out an entirely new and better sales monitoring and targeting system. No one lost their job. The experience led me into a process re-engineering group that used Activity-Based Management techniques to improve the profitability of multiple departments. As mentioned earlier, every one of those departments ended up adding staff, not reducing it.

As Tor puts it, "Productivity is golden." It releases talent to achieve more, and once that begins, it becomes contagious. The only caveat to this rule comes into play when you work in a monopoly setting, a place with a fixed amount of work that won't expand no matter what. Fortunately, there are very few of these.

Six Sigma organizations are the opposite. They may release talent, but all too frequently they send it walking out the door. Tor followed or benchmarked their progress over a number of years. On average Six Sigma firms laid off six percent of their workforce during the period of study. They were one-third as profitable as high-performing organizations (those increasing productivity at a rapid pace). Their successes have been related more to mergers and acquisitions—stripping out cost and improving quality—but once achieved, they quickly become another "me too," and growth falls to zero.

Making productivity contagious

Improving productivity can affect entire organizations and economies. It delivers greater capacity to serve wherever you may be.

Tor gathered the forty most productive people in the world. He hosted them in a setting that would match their egos so that they would behave for three days: Leeds Castle in England, which was built for William the Conqueror.

Over those three days he extracted the secret behind why they were all incredibly productive. It came down to this: You have to be on a quest that you freely choose and that never ends—a quest to which you can contribute the most.

Everyone loves to contribute, excel, and accomplish things. Removing the logjams allows this to happen. It can provide some of the finest memories, memories that are passed on among workers, family, and customers. Those same memories create a sense of pride that leads to trust, all of which compounds to lift productivity further. It's a contagious spiral of positivity.

As a leader, you need to cultivate that trust. Whenever you introduce change, perhaps the ideas in this book, put people at ease—explain why you are doing something and allay any fears, particularly when some may fear for their jobs. Use Joel's Implications Wheel® to think through cascading consequences. Remind employees that if everyone becomes more productive, sales will bring in more revenue, production will do more with less, marketing will expand into new markets, and stakeholders will get their returns. All will be good.

Remember to thank people. That single act can improve both productivity and trust. We spend too much time bringing bad things to people's attention. Don't forget the good. Tor recalls a visit to a North Sea oil rig. A worker had a note from his boss posted on his bulletin board thanking him for his great work. It was over five years old. On having the age of the note pointed out to him, the worker responded with, "Yes, but I have lived on that note every day since."

In closing this chapter, Tor would challenge us to find every school child. Help them find the quest they would freely choose for themselves. Teach them the concepts of productivity improvement and help them remove barriers to their success. Then watch them fly!

Note

1. Malcolm Gladwell, *Outliers: The Story of Success* (New York: Little, Brown, 2008).

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