

Digging deeper into the organizational mastery of Toyota

Deming vs. Taylor

Ben Atkinson (http://vision.haufe.de/blog/en/author/ben-atkinson/) in Insights (http://vision.haufe.de/blog/en/category/insights-en/) on 11. December 2015

At the turn of the 20th century, U.S. manufacturing had become a juggernaut. By 1900 the United States held 50% of the world's manufacturing capacity. A confluence of factors fed into this massive industrial expansion: improved transportation infrastructure, access to more raw materials, steady influx of immigrant workers, etc. The burgeoning automotive industry was positioned to ride these waves to success.

Another factor that allowed manufacturing to scale so quickly was the radical evolution of business management. The methods of Frederick Taylor became the underpinnings of the Industrial Engineering discipline. "Taylorism" was a radical philosophy that powered auto industry efficiency and growth. But, it had toxic side effects...

Taylor's methods enabled organizations to achieve greater productivity through 4 main principles:

- 1. Break down work into narrowly-defined tasks.
- 2. Train employees on specific methods for each task.

- 3. Provide supervision to enforce methods.
- 4. Divide work so managers plan and decide, and workers do.

Auto manufacturers embraced Taylorism not just for the productivity gains, but also for the increased control over processes and employees. Employees could be hired and trained more quickly, because deep knowledge of the production process was not necessary. By removing broad operational knowledge from the workers, it became harder for them to organize against unsafe conditions or workplace abuses. It's easier to replace a cog than a craftsman.

In 1935 the United Auto Workers (UAW) formed. Strikes began almost immediately at General Motors. The chasm between management and workers could not be starker, now that each had their own hierarchy. Protests over working conditions, wages and benefits became a recurring theme among the Big Three automakers: General Motors, Ford and Chrysler. As employee relations worsened, labor costs grew, while productivity and quality dwindled. Taylor's Principles of Scientific Management had fueled the rise of the auto industry, but also the fall of employee autonomy, job satisfaction and innovation. The costs proved too high.

It took about 50 years for the Big Three to dominate the auto industry by leveraging Frederick Taylor's methods. In another 50 years a small Japanese firm would dominate the Big Three by following the advice of a man who proved to be the antidote to Taylorism.

Dr. Edward Deming was an American engineer, statistician, professor, author, lecturer and management consultant and is well-known in the Total Quality Management circles. Deming developed sampling techniques for the U.S. Census and Bureau of Labor Statistics before applying his knowledge of statistical process control to industry. At the invite of the Japanese government, Deming taught his methods to a manufacturing industry just beginning to recover from World War II.

The story of Toyota's rise from a small automated loom manufacturer to world's largest automobile manufacturer is widely–known. And Dr. Deming's teachings are acknowledged as the foundation of the Toyota Production System, especially Toyota's obsessive focus on quality and process control. These are cited as the reason for such profound success. But, a critical aspect of Deming's system often goes unnoticed.

Taylor and Deming both emphasized an almost slavish devotion to measurement and statistics. But, where Taylor placed controls (supervision) over employees, Deming restored autonomy. Taylor restricted employee knowledge to one narrowly-defined task while Deming recommended cross-training. Taylor insisted that managers "think" and employees "do." Deming encouraged continuous improvement and respect for the employee's knowledge of the process.

How did Toyota so quickly surpass the Big Three automakers in all areas – quality, productivity and sales – although the competition had access to the exact same technology and statistical techniques? Toyota excelled because they brought the "soul" back to the workplace. By

providing meaning and mastery, and not just a job, Toyota has continued to set the pace for the industry. And it has done so without the union strife, costly pensions and debilitating healthcare costs incurred by other automakers.

Taylor pioneered a way to channel human effort and multiply productivity, but at an unsustainable cost. Dr. Deming developed a system to enrich all stakeholders in the workplace, which resulted in a virtuous cycle of improvement. Nevertheless, too many organizations today are still clinging to the hierarchies and controls of Taylor's Industrialism. Toyota, on the other hand, learned from Deming that industrial processes comprised of knowledgeable and motivated employees, create a platform for innovation.

No company is perfect, and of course, Toyota struggles with issues common to all large-scale human endeavors. But, by distributing control, knowledge and trust, Toyota is able to address failings quickly and learn from them. What we can learn from Toyota is this: when you put people at the center of the process, better business happens.

The idea for this blog post originated from Niels Pflaeging's article ". To learn more about Ben designing better workplaces see www.workwrightgroup.com/).

Photo Credit: Jayphen Simpson via Unsplash.



Comments

There are no comments

Leave a comment

Recommended posts