



Employees work hard making the company successful; the company should work hard to help employees make themselves successful.

Examining external vs. internal work

This month, I am reflecting on the 15-plus years I have been in the automotive and aerospace industry as a process engineer, quality engineer, and quality manager. During our careers, we are often measured in terms of how many years we have put in, or what sort of position or title we can now add to our resume. These measures, though important, aren't the complete picture of the work required today or what has also really been achieved.

The workplace is changing. And as a millennial studying industrial organizational psychology for my Ph.D., I have seen firsthand the different generations at work and the criteria for performance and success evolving. Employees show up to work for a paycheck, but they want something more. They want to grow. They want to be a part of something bigger than themselves. One person alone cannot run the heat-treat department. It takes a team. A team with individuals who have various skills that, when added together, can perform at greater levels than if they act individually.

But I want to separate something out in terms of work. There are two basic categories that I have been exploring on the podcast "Work Sucks, But I Like It". There is what I will call the external work — the work you do to make the world better, and the internal work — the work you do to improve your life.

Corporate cultures sometimes adopt tendencies to focus only on the external work. The internal work is a sort of afterthought, buried in a footnote section of the employee handbook indicating yoga classes or therapy are up to the employees outside work hours. From the multiple companies I have worked at over the years, small to large, there has only been one company that actually started to embrace the importance of this "internal work." They had an onsite therapist, onsite gym, and restaurant that transitioned to healthier foods.

IMPORTANCE OF GROWTH

Today's workplace culture needs to focus on this integration of providing resources for the internal work concept in order for employees to grow. Think of placing aluminum alloy parts into a heat-treat oven. The goal here is to put elements like silicon and magnesium back into

solution from the as-cast state to eventually age them to a more desirable condition. There is much work and effort to design and maintain heat-treat furnaces to do this. There is even a specification, the AMS 2750 for pyrometry, to achieve this. This internal work is then audited by external parties such as the customer or Nadcap to further keep



an eye on the consistency, quality, and performance. By performing reviews of the jobs and technical information flowed down by the customers and subscribers, heat-treat parts are transformed for service — the internal work to rearrange the microstructure to the desirable condition, to then perform the external work when put into place.

Companies have the potential to allow people to come to the work-

place and “transform” themselves into something amazing. I have seen this firsthand through taking people from backgrounds such as the service industry to making them competent heat-treat and pyrometry experts. And it isn’t by offering more training programs for AMS2750 or lectures on binary phase diagrams. That is part of it, but there are also the more subtle points of how to draft an email, how to present your material, how to handle a problem and respond rather than react. But first, you must be able to recognize what needs to be transformed.

In interviews on the podcast, I have asked these questions to various managers and leaders in different industries. Their responses are always very similar, whether you are talking about manufacturing or helping those with dyslexia. It is the art and science of focusing on each individual.

If companies want to grow and evolve today, more than ever they must be investing in their time spent with employees, understanding what motivates them. Deciding how they can best provide the resources for this internal work so they can show up each day and perform at their best.

I have suggested examples of this internal work that include telling employees to journal at home and express their frustrations of work when things get to them. Or to see a therapist to help sort these things out (because I am not one). I have even suggested different books, podcasts, and YouTube channels as resources. Because, sometimes, the problem isn’t the external work of heat treating or processing parts. Sometimes, the problem is the fact that workplace cultures overlook the employees and their goals, overlooks them as people versus assets. We all know stress doesn’t stop when we leave work. If someone is also under extra stress off the job, it makes sense that the extra stress will also come to the job with them. That’s where,

perhaps, some internal work in an on-site stretching class or therapist session could ease issues in both situations.

Further, the recognition of goals allows for proper awareness of the internal work required. Heat-treat operators wanting to learn more about thermodynamics and kinetic phenomena to transition into an engineer one day. Quality engineers learning how to “manage people” so they can take that leadership role one day.

Over the span of my career in the manufacturing industry, I have seen that when I focus on both my internal work and external work I have been able to perform during high-stakes projects. The fear sometimes of this internal work is that is called self-“help” indicating that we need help to fix ourselves. The problem is that help is viewed sometimes as weakness or inefficient. Compound this with self-help becoming very cliché today with LinkedIn AI generated posts indicating we should “seize the day” and “find your passion and you will never work another day in your life.”

And one would think after writing multiple self-help books that I would not be criticizing such efforts. The distinction here with internal work is that we must first recognize it (even if it is cliché). Then get the goal from each member of your team beyond what the heat-treat goals are. Treat this like recognizing how a controller needs tuning prior to a TUS. And then get to work on actually tuning the parameters so these employees can truly perform when put to the test. 🔥

////////// ABOUT THE AUTHOR

Tony Tenaglier is the quality manager at AlCuMet. He earned both a B.S. in material science engineering and M.A. in psychology. He is the author of two self-help books and is currently pursuing his Ph.D. in Industrial Organization Psychology. Contact him at ttenaglier@alcumet.com

YOU’VE GOT THE PRODUCTS. YOU’VE GOT THE SERVICES.

NOW, LET US SHARE YOUR STORY.

Thermal Processing wants to make sure the best possible audience knows your company. Through our print, online, and social media presence, our experienced staff can get your message to an industry that wants to know what you can do.

To learn more, contact our sales team
at sales@thermalprocessing.com
or call 800.366.2185

Thermal 
processing