



Transforming engineers into leaders

By: David Naylor
Executive Vice President
2logical

When highly motivated engineers prove their effectiveness, their employers identify them as good candidates for promotion. Employers expect these engineers to be able to *duplicate themselves*, teaching others and leading the team to higher levels of productivity.

However, the transition from front-line engineer to manager can be far from seamless. The skill sets that made them great engineers do not translate into the skills that will make them great managers of others.

What goes wrong? The disconnect lies in the new managers' self-awareness level. Can they identify the exact skill sets that set them apart? What mindset drove them to perform? Most importantly, do they know how to get others to embrace this optimal mindset?

To help high performing engineers become high performing managers, we must teach them how to coach and mentor others — how to duplicate themselves.

As a whole, engineers work in a tangible world with numeric properties. This analytical aptitude is what brought them to the company leaders' attention, because numbers and metrics align so well with management's thirst for quantifiable results.

But we manage *things*, not people. People need to be led, and that's a completely different process.

The aspects of leading people are outside of an engineer's process-oriented comfort zone. We want the high-performing engineer to create more high-performing engineers who can succeed at the same level. Instead, the engineer-

turned-manager falls into one of the three most prevalent management traps.

1. The functional engineering manager delegates only to the strongest people on the team, overburdening them over time, while underutilizing the weaker performers. When workloads exceed the strongest people's capacity, the manager tries to make up for the shortfall by working longer hours. The strongest performers burn out, the manager burns out and he resents the weakest members of the team — the very people who need his coaching and mentoring most. Many functional managers tell us, "I'm here working late every evening, and my people leave at 5 p.m. without a care in the world." **Result: No duplication.**

2. The hard-line engineering manager uses intimidation and high pressure to get the weaker performers to step up. These managers are fond of banging on the conference table and making a scene, embarrassing employees until they comply. This style can actually appear to be working, because people perform to avoid another confrontation, but this style also drives the best people away, because they know they don't deserve to be treated this way. The people who stay can be more damaging than the ones who leave, because they quit *mentally*: they become deadened and passive-aggressive. **Result: No duplication.**

3. The micro engineering manager gets lost in the reporting aspects of the role, the part that involves tracking and metrics — his comfort zone. This manager busies himself with layer after layer of spreadsheets and reports, shielding himself from the qualitative task of

coaching and mentoring people to improve their performance. **Result: No duplication.**

To get past these obstacles, the engineer manager needs to make an important transition: from management to leadership.

Leadership is about shifting people's thoughts and beliefs, and understanding the limitations people place on themselves. Removing these *limiting beliefs* and liberating people to perform are the keys to great leadership. Three of the most common limiting beliefs are:

- **Lack of ownership.** This manifests itself in excuse making, placing blame and resistance to learning new, necessary skills.

- **Lack of confidence and self-esteem.** This individual is unwilling to adapt, learn, grow or embrace change.

- **Negative attitude about their role.** This surfaces as a lack of work ethic, negativity and an absence of self-motivation.

As businesspeople, we see these manifestations every day in our people. Leaders must recognize the underlying disease and understand how they can cure this disease.

To become leaders, engineers need to understand how to duplicate themselves. They must learn to take the core beliefs and mindset they brought to the job and instill these in others on the team. If we can train our engineers to do that, they will be enormously successful as leaders.

For more information, contact 2logical at (585) 586-4141 or e-mail info@2logical.com.