Robert M. Williamson, Strategic Work Systems, Inc. Imagine this: For a portion of today's maintenance and reliability workforce, the thought of a "skills shortage" means employment security. For leaders of today's maintenance and reliability workforce, skills shortages can mean job loss.

As a maintenance technician you will have employment security if you have the skills and knowledge to be a proficient technician: One who knows how to perform preventive/predictive maintenance, one who knows how to locate the root causes of problems, and one who knows how to make efficient and effective repairs as part of a high-performing maintenance team. Why? Because maintenance technicians with your expertise are in high demand, and there is a rapidly declining number of people in the labor market with that expertise. It is simple supply and demand—increasing demand, declining supply.

As a maintenance manager, supervisor, or plant engineer you will have employment security if you have skills and knowledge to be a proficient maintenance and reliability leader: One who leads high-performing teams of maintenance technicians in proactive, planned, scheduled, preventive/predictive, and efficient and effective corrective maintenance. Why? Because maintenance and reliability leaders with your expertise are also in high demand, and, you guessed it, are in short supply.

Excellent maintenance and reliability skills and knowledge are in peak demand in today's work environment and labor market, and the demand has been increasing at an alarming rate. The problem is that many people working in the maintenance field today are stuck with the same old skill sets they had years ago.

Many manufacturing plants and other equipment-dependent facilities require higher levels of equipment performance and reliability than ever before. These new levels take focused maintenance and reliability leadership coupled with a skilled and knowledgeable team of maintenance technicians.

Here comes the dilemma. As a leader, your employment security, and your sanity, largely depend on the skills and knowledge of the maintenance technicians who work for you. The more proficient your technicians are the more job security you have. The opposite is also true: the more inefficient and ineffective your maintenance technicians are the more your security is threatened.

We have seen an increasing number of plant engineers, maintenance managers, and the like get extremely frustrated and overwhelmed at their workload because of the skill sets of their maintenance technicians. Their plants and facilities became more and more reactive to their maintenance approach—there were not enough people to do all the repairs and still keep up with the preventive/predictive maintenance work. Then, the maintenance leaders became more reactive in their work by default. They ran out of time to be proactive, to plan, to lead improvements in maintenance and reliability.

What about the maintenance technicians? The good ones move on to better jobs, jobs where they can continue to do rewarding work, to learn, to improve the equipment they are responsible for. The ones stuck in the same old skills set tend to stick around; the maintenance workload grows, overtime pay increases, and they know their way around the plant. They generally want to do good work and work to the best of their ability. But they struggle to improve equipment performance and reliability, putting their jobs, and the business, in jeopardy.

One important, and often ignored, answer to this dilemma of skills shortages and job loss is training. The skills and knowledge of today's maintenance technicians must match the needs of the equipment and processes they are responsible for.

However, formal maintenance and reliability training is in very short supply. Many of the strong vocational-technical schools of the past have dwindled to very few who offer maintenance-related skills training. Now it is mandatory that manufacturing companies, institutions, facilities, and all employers of maintenance technicians establish formal training and qualification programs for their people.

Today's maintenance and reliability skills and knowledge training must be more focused, efficient, and effective than in the past. It must be focused on measurable results—improvements in equipment performance and reliability. Our futures depend on a highly skilled and knowledgeable pool of maintenance technicians. **MT**