ADDRESSING THE TALENT SHORTAGE

CERTIFIED MISSION CRITICAL OPERATOR

CMCO

IN THE DATA CENTER INDUSTRY

The data center industry continues to experience rapid growth, and with this growth has come a dramatic increase in the need for mission critical operators, the operations personnel who maintain the diverse and complex infrastructure of the centers.

According to industry experts, the lack of awareness of the mission critical operator role as a career field, the ongoing shortage of talent, and the lack of a formal or recognized program for education and training to create the required skill set have been major issues for data centers, and the resulting personnel deficits can translate into serious implications for performance.

The key to a healthy pipeline of employees for any industry is the ability to attract a broad range of personnel. Tony Rossi, head of mission critical solutions for AirTight FaciliTech in Charlotte, NC, noted: "Visibility of this industry as a whole is lacking. People are not aware of what the jobs are. They have heard the words 'data center' but they primarily think of IT when they consider what jobs are available there."

MISSION

CRITICAL

THE INDUSTRY IS GROWING

Compounding this issue is the tight U.S. labor market. According to Dennis Cronin, CEO of Resilient Solutions, "We're effectively at full employment in the U.S. It's bad enough that people don't have the skills needed to work as an operator in a data center. We just don't even have the people. This creates a great challenge for us: how do we operate and maintain these facilities in a safe, economical, and efficient manner?"

Add to that the graying of the American workforce. With the baby boomer generation reaching 65 and retiring in record numbers, the data center industry has felt the effects intensely.

The lack of awareness of the opportunities available for mission critical personnel and the tight labor market are not the only causes for worry; another issue is the lack of programs that prepare and train people for the work. Educational institutions have been slow to respond.

While training for some of the required traditional trades still exists (e.g., HVAC, electricity) and some community colleges have developed programs focused on the data center industry, there is an overall dearth of vender-neutral educational programs to address the full scope of the operations side of the field. "To operate these increasingly complex data centers," says Cronin, "personnel trained in multiple, overlapping functions are required."

HAVING THE RIGHT PEOPLE

In other words, employers need operators who can work well with a high degree of accountability, adapt to continuously changing technologies, address a broad variety of systems, and quickly identify issues and handle emergencies. In the opinion of Ray Caponi, vice president at T5 Facilities Management, "If you don't plug the right people in, you're toast." Indeed, the costs of hiring insufficient staff members who lack mission critical knowledge and skills can be enormous. Todd Pagliarulo, senior project manager for Clark Nexsen, notes, "It can impact downtime if you have an issue pop up that is beyond the ability of the person on the spot to deal with. If you have to wait for somebody else to come address it, you can have a cascade and shut the entire building down very, very quickly." Adding to this idea, Cronin said the cost of having a talent deficit can result in, "A disaster. Process interruption. Data center downtime, misapplication of assets. We're talking about millions if not billions of dollars' worth of assets that are put at risk every day because of this inability to address an issue properly."

In the short term, one way to bring the next generation of employees up to speed on the necessary baseline knowledge and skills is through training, development, and mission critical certification programs.

The question of how and when to best conduct fundamental training and certification are dilemmas for many organizations. Pagliarulo says, "It's the question that a lot of facilities are now faced with: do we bring on individuals that have certain skills and we train them and teach them, or do we look for people that already have a skills base or knowledge base? But that all comes with certain dollars and experience levels and it has different implications there too."

CMCO IS OFFERED NATIONWIDE

Even more important, is there a way to ascertain whether they are truly adept at handling mission critical operations? To address that very question, the U.S. Department of Labor awarded a training grant to Cleveland Community College (CCC), which, in turn, worked with data center experts to create a list of the skills and knowledge viewed as fundamental to data center operations. In other words, CCC partnered with experts in the data center industry to create a vendor-neutral certification known as the Certified Mission Critical Operator program (CMCO). Once the exam blueprint for CMCO was adopted, industry experts turned to Global Skills X-Change (GSX) to administer and manage the program. GSX is an organization that designs innovative strategies and solutions to better leverage people to meet current and future workforce challenges (see mccerts.com for details).

Under GSX, CMCO is now offered nationwide and is being used by companies like Disney, Google, and other data center organizations to identify new talent for the industry. The hope is that CMCO will continue to gain recognition, bringing a standard level of knowledge to a whole new generation of mission critical operators.

TJ Ciccone, director of field operations for CoreSite, sees great value in having data center employees certified with CMCO. "I think the reason certifications like CMCO are so important is, a lot of times, people try to equate some of the tradesman skills with actual data center operations. I kind of equate it to 'just because you work in the pit doesn't mean you're a Nascar driver,' and 'just because you're an airline mechanic doesn't make you a pilot.' Learning how to use and apply it is why certifications are so important."

Many in the industry understand the value of having operational certifications like CMCO, but they are concerned that far too many certifications are only aimed at the IT or management side of the business. "Very little certification applies to the electrical, mechanical, fire protection—all the basics that support the data center. It's like, we spend all of our money every year repaving roads, but we pay very little attention to the bridges," says Cronin.

Marcus Hassen, data center program manager for AT&T's Real Estate Operations, sees an operational certification, like CMCO, as having great potential in the screening and hiring process, allowing those resumes with mission critical operator credentials to rise to the top of the pile.

MEETING INDUSTRY STANDARDS

"We can have a high degree of confidence... that this candidate has the varied skill set we need and has applied it with an emphasis on our industry, and the range of knowledge goes beyond just an IT certification."

Some major companies are already listing credentials as highly desirable or required in their job descriptions, and this may eventually become an industry standard. And some data centers are now requiring new employees to prepare for and take the Certified Mission Critical Operator program (CMCO) before being hired. They are also requiring current employees to test their knowledge and skills in this area. Jim Larson, senior manager of mission critical facilities at the Walt Disney Company, says focusing on standards-based, fundamental-level certification provides the "assurance that the person that I have hired or I'm contemplating hiring will perform successfully in our environment and understand our terminologies and at least the fundamentals of some of the processes that we apply."

As the industry grows and changes, attracting new talent and maintaining a healthy pipeline will mean focusing on solid training and educational programs and operational certification.

No doubt, awareness, training, education, and mission critical certification will each play a vital role in addressing the talent shortage.