

Technology Driving Convergence of Industries & Their Workforces

written by Lauri Moon | June 13, 2016

Packaging, processing, food service and restaurant operations are all automating

(On the Edge Blog - Keith Campbell: 5-31-16) This past week, I had the opportunity of combining my attendance at The Automation Conference and Expo, focused upon manufacturing and produced by PMMI Media Group, with a visit to the NRA Show 2016, focused upon food service and produced by the National Restaurant Association. Both events were held in the Chicago area. I expected to find some elements in common, especially workforce issues, but I was surprised to find so many common elements related to both workforce and automation.

It is but a small step from a food processing and packaging line in a low volume manufacturing plant to a food service kitchen for a caterer or institution such as a school, hospital, or military base. And it is but another small step from food service to retail restaurants. Recognizing this, it should be no surprise to find a convergence of issues driven by technological change.

Food service operations, restaurants and bars are automating using many of the same technologies found in manufacturing. The NRA show floor included exhibitors selling sensors, controllers, pumps, valves and motors. It included processing and packaging machines for performing unit operations and combinations of these machines organized into workcells. It included robots and 3-D printing. Automation systems integrators, business systems integrators, and IT companies were promoting products and services, and the Internet of Things (IoT) was a popular theme.

What appears to be an exciting growth area for these food services industries are what manufacturers would call Human Machine Interfaces (HMI), Supervisory Control and Data Acquisition (SCADA) systems, and Manufacturing Execution Systems (MES). Many of the solutions shown were based upon the use of tablets and the cloud. Suppliers indicated that increasing complexity of the industry, lack of

appropriately skilled workers, and rising minimum wage standards have been causing their phones to ring off their hooks as food service and restaurant operators seek to automate.

Experience tells us that automation drives up the skill requirements of the workforce. Lower skilled tasks are often taken over by machines and software, and people in those jobs often have the opportunity to move up by acquiring new skills. The workers that remain perform higher value-added tasks such as data analysis, problem solving, troubleshooting and maintenance. As food service automates, workers will need to be upgrading their skills. Our high schools will need to be turning out graduates with different and better skills, as lower skilled jobs of the past disappear. I would caution, that this should NOT imply sending more to college! Career paths will be altered. Career pathways between manufacturing and food service may also converge.

My mind isn't made up if this will exacerbate or reduce the skilled worker shortfall for both manufacturing and food service.