**Technology to the Rescue?**

Raising the minimum wage to $15 / hour has created quite the commotion in hospitality circles around the country. Quick Service Restaurants have been the most obvious target, but other restaurant segments and hospitality businesses are also going to be affected. At this time many local governments have adopted, or are moving towards a higher minimum wage. For example, Washington, Arizona, Colorado and Maine recently voted to increase the minimum wage in their states. In San Francisco, Seattle, Los Angeles, New York, and Washington DC the minimum wage is at - or anticipated to be at - the $15 mark in the next year or two.

Under these conditions greater attention to productivity will be vital for success in highly competitive environments - like the QSR segment. Productivity is a measure of efficiency which shows how effectively economic inputs are converted into outputs. In the *Accommodation and Foodservices* sector productivity has been flat over the last decade. Output has increased modestly – but so have labor hours (input). The result is that productivity has remained level.
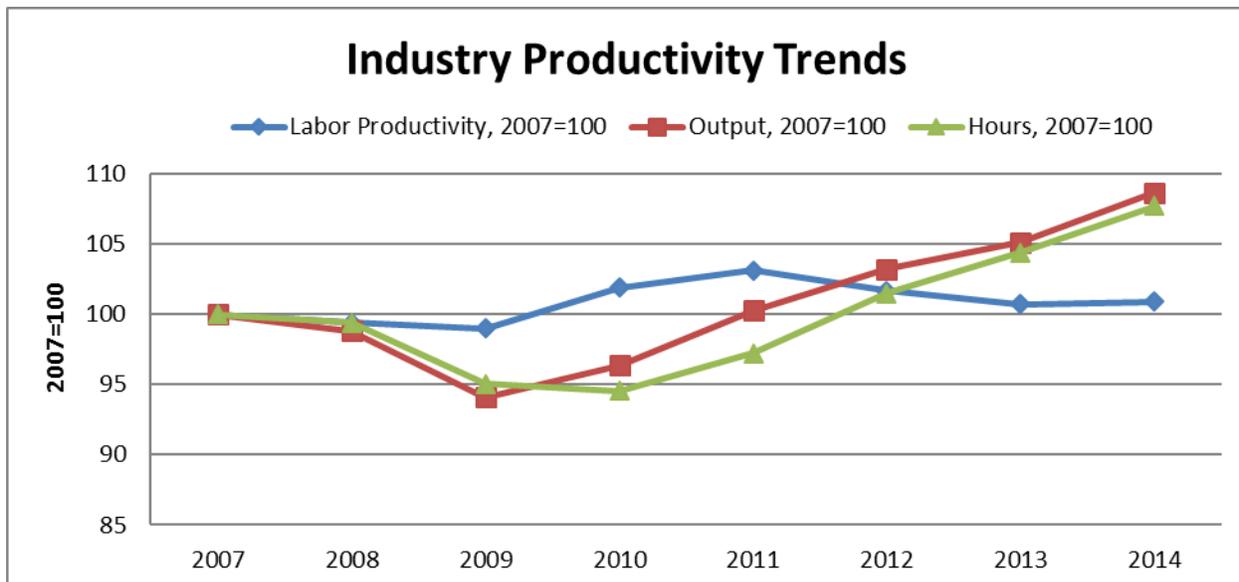
From 1987 to 2014, productivity increased at an average annual rate of 3.1 percent in wholesale trade, 2.8 percent in retail trade, and 0.4 percent in food services and drinking places.

Increasing (labor) productivity will require a multifaceted approach. One aspect will be incorporating technology. To this end some hotels have incorporated kiosks to expedite check-in/check-out processes. Also, a number of restaurants are using table-side tablets that allow customers to order as soon as they are ready. A case in point is Chili's; nearly every Chili's in

the country is using or will be using tabletop kiosks that handle payment, as well as ordering/reordering of food and beverages, and playing games (http://www.digitaltrends.com/cool-tech/worlds-high-tech-restaurants/#ixzz4DufU4yqg). Similarly, McDonald's has launched a kiosk-based ordering and payment system in Australia called "Create Your Taste." The kiosk lets users design their burgers - type of bun, toppings, and dressings, etc. Before long Apps will allow customers to order their meals ahead of time and instead of cash, use a smartphone to pay.

In addition to technological advances that expedite the ordering and payment processes, new technologies may enable hospitality businesses to engage in revenue and yield management in order to drive sales. Currently, POS systems allow operators to measure sales of individual items, sales by the hour, etc., and to compare this information to historic data and/or budgeted amounts. Subsequently, prices could be adjusted on-the-fly when sales are not as expected and/or when sales are brisk.

In the back of the house advances in technology are making it possible to program the cooking process so that all that needs to be done is to identify the product, measure it, and press START. "Intuitive" touchscreen controls reduce the skill level needed to operate the equipment, and other advances are enabling operators to reduce the amount of equipment needed. For example, Combitherm® Combi ovens (by Alto-Shaam) can replace "a convection oven, kettle, steamer, fryer, smoker, and dehydrator." This will impact space utilization and the allocation of space for functional areas. Correspondingly, planning the layout-design will be one of the most important methods in efforts to reduce space, maximize efficiency, and provide excellent food and service.

Then there is robotics. According to the WSJ.com, food service is an industry most likely to be taken over by technology; 73% of the tasks performed by food workers could be automated based on existing technologies (WSJ.com, *Robots Eye Jobs in Food Service, Manufacturing*). Here are a few relatively recent forays:

1. Reis & Irvy's Fro-Yo Kiosk— the first fully robotic vending machine for the frozen yogurt market. It dishes out <u>fro</u>zen <u>yo</u>gurt that consumers can personalize with their favorite toppings. A robotic arm removes a cup from the cup holder, places it in the yogurt dispenser, dispenses the desired flavor, and then moves it along to add the toppings.
2. Hilton Worldwide and IBM collaborated to pilot "Connie" – a robot concierge named for Hilton's founder Conrad Hilton. Connie works with team members to inform guests on local tourist attractions, dining recommendations and hotel features and amenities.

There are a number of advantages to paying higher wages. One is the reduction of (excessively high) turnover rates in the industry. (There is data to suggest that turnover rates decline when compensation increases.) A more stable, skilled and committed workforce would help eliminate the inadequate and poor service that often results because of high turnover. Also, attention on performance will focus both employers and employees on the standards and behaviors that drive the operation -- which will enable both groups to help meet the long run goals of the organization.

There are also a number of disadvantages – among them higher prices in a highly competitive environment. Perhaps the larger question has to do with the nature of these jobs. Often times they have been used as entry-level positions. It seems as though we are now considering creating longer-term positions that will provide a level of support for a family. If this is the case the number of "first-time" and temporary jobs available for teens could be reduced. To be sure this will impact the industry.

Increasing productivity involves more than simply paying workers less and producing greater quantities. Labor productivity can be increased by providing employees with better equipment and technology to more efficiently complete tasks and produce better products. Streamlining the systems and speeding the processes by incorporating technology, reducing waste, realigning staff duties, training employees, etc., will enhance productivity. At the same time operators must be mindful when applying technology that one of the reasons customers patronize their business is the experience. Does a kiosk make sense in a hotel lobby – in the same way it does at the airport? At what level does it make sense in a restaurant? These are the questions with which our technologically-oriented graduates must grapple.