A paradigm shift has occurred in human capital management because of the evolving nature of the job market. Acquiring a degree from a prestigious university used to be the main route to success but not anymore as there are many paths to success. Where are the good jobs? Well, they are not only in the banking and the financial sector.

In 2013, at Ngee Ann Polytechnic's 50th anniversary celebrations, Prime Minister Lee Hsien Loong told polytechnic students that getting a degree immediately was not the only option; they could work for a few years first or to start their own business. PM Lee advised, “You will gain experience and understand yourself better and then be better able to decide what the next step will be” (Davie, 2013). Singapore parents spend millions annually on degree courses for their children here and abroad in the hopes that their children will land a good job and repay them or the loans they acquire. But good jobs are not solely in the hands of the degree holder. Minister for National Development Khaw Boon Wan pointedly cautioned, “You own a degree, but so what? You can’t eat it. If that cannot give you a good life, a good job, it is meaningless” (Davie, 2013).

The United States (US) economy and education system reflects a similar paradigm shift in employment. For decades, Americans have been told that a good career lies in high-end professionals services such as law and creative professions like software coding and systems design. Many — especially the middle class — thought that the only way to improve opportunities for their children would be access to higher education.

However, the returns on higher education have been declining since the early 2000s. Many of the skills learnt in universities are in over-supply. In 2008, more than a third of university graduates waited tables and manned cash registers (Kotkin, 2011). These jobs were once held by non-graduates. Similarly, an excess of postgraduate skills such as in law are no longer in great demand, leading to a glut of lawyers. These graduates and post-graduates simply do not have the skills that are in demand.

In Singapore, a university degree is often seen as a golden ticket to job security and career success, but some of the shine is coming off that path. More graduates here are experiencing underemployment, which the Ministry of Manpower (MOM) defines as workers who clock at most 35 hours of work a week, even though they want and are available to work more hours. In 2013, some 15,100 degree holders were underemployed, up from 13,000 in 2012 (Boon, 2014). This works out to 2.3% of all employed graduates, inching up from 2.2% the year before.
In order to prevent an upward trend of underemployment, the emphasis should be on skill sets — the need to continually maintain and upgrade skill sets such as those in manufacturing. The US is also a good example of the type of good jobs that are emerging. A 2005 Deloitte Consulting report found that 80% of manufacturers expected a shortage of skilled production workers (Deloitte, 2005). Some blame the shortage on the decline of vocational education because craft or skilled work was commonly perceived to be dead-end jobs.

**Middle-skill Jobs**

By 2017, an estimated 2.5 million jobs in the US will be these good middle-skill jobs, which would account for 40% of all growth in the workforce (Webster, 2014). Arguably, these jobs could be termed “blue collar” but they are worlds apart from the usual assembly line, technician or plumbing jobs. Technology has altered these jobs completely.

The manufacturing sector also has great need for skilled workers. However, for specific industries such as aeronautics, the standard of skill sets required is high. Patrick Gibson, senior manufacturing executive at Boeing’s plants in Ohio said, “We don’t just need people, we need people who can meet our standards” (Kotkin, 2011).

In Singapore, the in-demand jobs that require core competencies and deep skills are for:

- Skilled workers with laboratory, regulatory affairs and technical sales expertise in the medical industry. The biopharmaceutical sector now contributes 4 to 5% of Singapore's gross domestic product (GDP). Pharmaceutical companies are building new-generation plants and innovating to meet growing demand in the region.
- Mid-level IT professionals to meet the demand for cybersecurity that is becoming a growing concern for businesses. Infocommunications services companies are drawn to Singapore because of its infrastructure, robust intellectual property protection regime, good physical and trade connectivity, and easy access to global talent.
- Mechanical and electronics engineers to meet the demand of key engineering industry clusters which include chemicals, biomedical sciences and transport engineering. For instance, demand for engineers has risen due to the growth of Singapore's aerospace industry and the development of R&D and innovation functions across many industries (“S’pore’s most in-demand jobs”, 2015).

The trends and developments in top paying industries are expected to spur the overall increase in wages and demand for specialised workers.

**Meeting the Skills in Demand**

One such industry that has taken a proactive approach to ensure it has the required number of skilled candidates in future is the food manufacturing industry. Recent polytechnic graduates aiming for a career in the food manufacturing industry could enrol in the SkillsFuture Earn and Learn Programme (Ang, 2015). The 20 polytechnic graduates currently on the programme are working for several food manufacturers. Their lessons are held at Singapore Polytechnic (SP), while on-the-job trainings are conducted at their respective companies. The training plans were jointly developed by the various polytechnics.
In addition, the trainees are also involved in company specific projects that are supervised by company mentors and SP facilitators. At the end of the 18-month programme, the trainees earn an advanced diploma in applied food science awarded by SP (Ang, 2015).

**Attractiveness of the “Blue Collar” Job**

But why would someone aspire to a good “blue collar” Job? The reasons are many but the key one is: trade or vocational school such as polytechnics and ITE are lower-cost and take a shorter duration to complete than enrolling in university. While university students are still studying, polytechnic and ITE graduates are already earning an income and paying off their tuition loans. While it could be true that university graduates earn a higher starting salary and have a higher income ceiling, in terms of opportunity costs, they also have to stay longer in school, incur more loans and have a shorter earning span.

Over the course of an average 40- to 50-year career, if study loans, shorter school time, more work experience and technical knowledge are factored into the equation, trades and skilled workers could earn as much as university graduates.

In addition, skilled jobs are not easily outsourced and could arguably be more secure than Professionals, Managers and Executives (PMEs) jobs, where the latter could be more easily replaced by machines or outsourced overseas (Anderberg, 2014). In terms of work satisfaction, a skilled worker who does creative manual work involving different on-site locations, problems and experiences may find the job more fulfilling compared to a PME worker sitting at a desk undertaking routine monotonous tasks. In terms of productivity, white-collar PMEs are subjected to countless meetings and the scourge of the Internet that waste their time. In contrast, the skilled blue-collar worker is always on site and learning new skills and exposed to new challengers.

Which would you think are happier with their respective jobs?

In his final May Day message as NTUC Chief, who’s now Minister for Manpower, Lim Swee Say urged workers to quickly pick up skills and businesses to transform existing jobs at a faster pace to ward off an increase in unemployment (Neo, 2015). As so aptly pointed out by Minister Lim, with the world changing at a much faster pace, Singapore would do well to venture ahead of others.

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*The views expressed are the author’s and do not represent those of the Institute.*

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**References**


Webster, M. (2014, September 30). Where the jobs are, the new blue collar. *USA Today*.

S’pore’s most in-demand jobs command up to $12,500 a month. (2014, April 22). *AsiaOne*.