From an artificial intelligence (AI)-powered assistant capable of scheduling appointments to a fleet of robots capable of filling a 50-item grocery order in just five minutes, the technology-driven world that we live in is one that is filled with endless promises.

These disruptive technologies have, over the years, brought with them a wave of change, altering almost every discipline, industry and economy in its wake and ultimately, reshaping the future of employment through the elimination of the need for manpower in repetitive jobs while enhancing productivity and encouraging economic growth.

But while the march of digital widespread continues to change the future of work, the question on many workers’ minds is – at what cost? Digital transformation brings about much hope and enthusiasm for the future, but along with it are also feelings of apprehension and uncertainty among workers, with the fear of jobs becoming obsolete and workers being replaced by robots being great cause of concern.

**Workforce of the Future**

Are humans destined to disappear from the workforce? More importantly, how far are we from these waves of job obsolescence?

These ominous questions have a legit standing in the modern workforce as they represent the crux of the problem, insofar that we wonder how emerging technologies will change the nature as well as the availability of jobs in the next few years.

Indeed, as technological advances push forward, especially in the areas of automation, artificial intelligence and robotics, it is reasonable to believe that this will result in massive waves of unemployment.

There is, however, a silver lining. Technology will also create new jobs, and give rise to the possibility of redesigning work, and creating
growth opportunities and greater value for businesses. If the World Economic Forum (WEF)’s The Future of Jobs Report 2018 is to be believed, emerging technologies will create more jobs than it destroys, at least for the next four years. Specifically, the report predicts the loss of 75 million jobs by 2022, and the creation of 133 million jobs over the same period, for a net increase of 58 million jobs. This is obviously good news, although this extraordinary swing in jobs will pose a challenge to both employers and workers – for employers, this would mean making the right investments in technology to future-proof their businesses; for workers, this would imply acquiring the right skills.

In order to create the report, the WEF surveyed executives, especially chief human resources officers from 313 of the world’s biggest companies, representing over 15 million workers in 20 developed and emerging economies. The companies represent a diverse set of industries including automotive, aerospace, supply chain and transport, travel, financial services, healthcare, information technology (IT), mining and metals, oil and gas, professional services, and others.

Knowledge is Power
Upskilling and retraining employees is not a brand-new concept in the realm of human capital development. Its importance can be witnessed from as far back as the first Industrial Revolution, where revolutionary manufacturing processes were introduced to the world. Even back then, workers needed to learn how these new processes work in order to stay relevant.

“Today we are faced with a similar scenario, albeit with a focus on digital adoption and the fourth industrial revolution (IR4.0),” Kelly Services Malaysia managing director and country head Brian Sim shares. According to Sim, it is very important for businesses to invest in upskilling and retraining their employees for two reasons:

• To meet the expectations of the employees – Employees today prefer working for an employer who is willing to provide training and upskilling for their workforce. This stems from a growing realisation that jobs today are being constantly upgraded to keep up with the latest developments in technology;

• To retain employees – Periodic training and upskilling can help boost employee morale, providing them with much needed knowledge about the latest developments in the industry that they work in. This in turn results in happier and more productive employees who feel more secure about their jobs, which ultimately lead to better workforce retention for the employer.

In fact, a recent survey conducted by Jobstreet Malaysia for its Job Outlook Report 2019 reveals positive development in the effort to upskill and retrain local employees.
According to the survey, 96% of employers surveyed have perceived that the talent landscape will change with the shift to a digital economy. The main reason cited for this change is the increasing demand for digital skills but limited supply of talent with these skills in the market.

The same report went on to note that due to digital transition, 60% of employers surveyed have implemented some form of digital and automation technologies with the expectation for their employees to upskill on digital skillsets to keep up with the changing workforce landscape.

“Due to the increasing demand for digital skills coupled with the limited supply of these talents in the market, the war for talents has become more intense with the shift to a digital economy and IR4.0,” Jobstreet Malaysia country manager Gan Bock Herm tells Smart Investor.

“Employers are also constantly investing to attract and retain key talents by providing on-the-job training opportunities or formal training and development programmes in addition to investing in the appropriate digital technologies and process capabilities.”

That being said, the ‘right’ skills are the key to an individual’s – and an organisation’s – innovation and growth, especially in the digital era. As such, Gan believes that the top five traits that are highly valued by employers are problem-solving skills, communication skills, work independence, teachability and the ability to work under pressure.

**Upskilling the Malaysian Workforce**

The onus of upskilling and retraining employees falls largely on the employer, but the question is, are Malaysian employers doing enough? Kelly Services Malaysia’s Brian Sim believes that Malaysian employers can undoubtedly do more.

“Finding an employee that can tick all the relevant boxes is certainly a challenging task. This is exacerbated further by the growing number of new digital skills needed for today’s jobs. Some employers prefer hiring experts that fit their criteria rather than upskilling their present employees,” he discloses.

On the setbacks to upskilling the local workforce, Sim suggests that cost is the primary driver as most Malaysian employers do not see a justification in spending large amounts of money on training their employees.

The culture of ‘wanting the right employee, right now’ often results in workforce attrition with present employees getting left behind in terms of skills development, Sim reveals, adding that this is in fact a short-term solution. As such, investing in present employees is always encouraged as they are often more loyal to their employers, thus resulting in better long-term benefits for the business.

In this case, one fear that many employers have is the fear that employees who undergo upskilling may end up leaving the company.

As upskilling results in more proficient employees, their demand also increases in tandem, thus creating a risk that the employee will leave for a better job after undergoing training.

Another setback is finding the right trainers to conduct the upskilling process. Much like finding the right employee, finding the right trainer is equally as crucial to ensure that the money spent is justified.

“Our advice on this is for employers to exercise due diligence before approaching a training provider. Approaching established trainers with good track record is often worth the money spent,” Sim adds.

**Effective Upskilling in Busy Workplaces**

As digitisation, automation and AI change the face of work, there is an urgency for employees to learn new skills in order to meet market demands. But how do companies make upskilling more effective, especially in busy workplaces?

“Employees need to move away from a remuneration system aligned to job designations and pay bands to a progressive and flexible rewards and promotion system that matches clusters of skillsets to changing working requirements,” opines Selangor Human Resource Development Centre (SHRDC) executive director Tan Beng Teong.
To cater to the ever-changing nature of industries and organisations, more efficient, dynamic and agile training options in multiple delivery formats should be provided to the current workforce soon to be dominated by the millennials. Employers are thus encouraged to consider training programmes and ecosystems consisting of one or more of the following:

- Plug and play learning;
- Learning in small micro units with flexible schedules;
- Recognition of learning across different sources, including non-traditional sources;
- Personalised, adaptive and agile individual learning;
- Adoption of relevant ICT platforms to enhance learning and training such as augmented reality/virtual reality (AR/VR);
- Cross-competencies learning;
- Validation of skill sets rather than qualifying competencies for job; and
- Incentives for new skills learning and life-long learning.

Established in response to the need to appropriately skilling Malaysians for a sustained and addressable pool of high-impact talents for companies and businesses especially in the era of IR4.0, the SHRDC is a non-profit training talent development centre guided by the government, industry members and talent partners to ensure the job-readiness of employees in the state.

To cater to industry needs, workforce preparation and national aspirations, SHRDC provides competency-based training programmes related to smart factory and IR4.0 applications as part of the Malaysian Smart Factory (MSF) 4.0 initiative. Available for both the current workforce and skills training for the new graduates, these training programmes include the Smart Factory Technical Overview: Enabling Technology for Industry, a customisable programme that offers a platform for knowledge sharing and demonstrations of technology to help industries upgrade and digitise operations to Industry 4.0, as well as the Information Technology Fundamentals that offer big data and analytics-related competencies.

Fundamentals that offer big data and analytics-related competencies. While the aforementioned programmes have specific target audiences that include business development managers, engineers, technicians as well as academia with relevant backgrounds, the MESTI Digital programme is designed to support the development of digital literacy skills and is open to the general public.

Funding options include the Human Resources Development Fund (HRDF) for current workers, as well as SHRDC’s own training grants for eligible undergraduates at diploma and degree levels.

“The Internet of Things (IoT) applications is impacting our lives daily, from significantly changing the workplace to concerns that humans will be replaced by robots and AI,” SHRDC’s Tan points out. “The flipside to this is the fact that there are essentially human skills that are not replaceable, and this include communication, critical thinking, creativity, and the ability to make sound judgement beyond data and precedence.

“The balance between technology and humanities is the guiding principle at SHRDC, towards effective training programmes that support technical and essential skills development,” Tan concludes.