At the dawn of the 21st century, the world has stepped into the era of an information civilization. Computing power has grown exponentially from Apollo lunar mission to Apple iPhone invention. The benefits that digital platforms have brought to consumers and businesses have not come without costs and consequences. And yet in doing so, it has opened doors to new industries once imagined only in the world of science fiction. Technology is the main battlefield for all businesses and many other institutions, including academia. Steve Job’s invention of the (Apple iPhone) SMART phone in 2007, was the milestone event that triggered the 4th Industrial Revolution (FIR), an unfolding myriad of challenges.

Evolving technology has impacted human civilization - from fire to tools; to steam engines to the modern Internet. Technology frees up talent to deploy on, creative problem solving and solution building in businesses. on every economic sector. The rapid pace of digital disruptions impacting on every economic sector.

The ability for businesses to survive depends purely on to harness technology as a critical enabler for efficiency and innovation. New technologies are driving the convergence of industries; for example, Hypermarket retailers entering logistics and ride-hailing companies offering payment services.

In the current context of constant change, the role of professionals and their functions also subject to change. Professionals are expected to make complicated things simple. Moreover, they need to solve problems creatively, counting on their expertise and experiences without leading to complications. Simultaneously, professionals need to think and plan how to contribute to add value in the enterprise, be ready to embrace change, and adapt to future challenges by seeking opportunities to upskill.

Eventually, all Professionals will end up as entrepreneurs driving the businesses with the CEOs. They must also be willing to act when complete information is not available, or even some of the data seems to be contradictory. Most importantly, they must be prepared to learn, unlearn and relearn so they can quickly respond and adapt to the demands of a rapidly changing world. In the Industry 4.0 era, Professionals are now in charge of their careers, as such the skill sets, they possess needs continuous up-gradation corresponding to the digital disruptions.
There is an increasing trend that non-standard employment is becoming mainstream in the workplace. The new digital Labour platforms are fluid, and growing segment of the modern workforce consist of freelancers, including the professionals. The new actors gaining recognition in the emerging digital Labour platforms include placement agencies, recruitment agencies and temporary work agencies.

It is expected that the temporary work agencies (TWA) are now being increasingly becoming the de facto employers, who are dominating in the digital labour markets. In future, a professional could be working for two or more employers. The alternative workforce has gone mainstream with more people embracing the path to greater autonomy and more flexible meaningful work. The new digital platforms enable new styles of working to stay relevant and employable for multigenerational workforce.

Global supply chains or value chains are demonstrating the ability to source and process raw materials efficiently and offer new customer experiences getting closer to the markets. Bigger may not be better for many companies in the current creative responses led, digital era.

Digitalisation is changing enterprises and altering the way we work and, inevitably, our way of life. These algorithmic functions will displace the traditional managerial roles of professionals and managers such as planning, forecasting, organising, coordinating, directing and monitoring. On top of that, 3D printing will undoubtedly add a new dimension to manufacturing.

Fast, easy to use SMART phones are stimulating our human senses and are changing our behaviours. All our habits and movements are monitored and tracked with Artificial Intelligence and Machine learning algorithms. Our real-world interactions become data traded among the Data Dictating Tech companies, who use these data to develop services that influence our behaviours to meet commercial mercantilist ends.

Shifts in job roles and occupational structures are transforming the demand for skills at a faster pace than ever before. For achieving a positive vision of the future of jobs, governments and businesses need to come up with inclusive strategies and programs for skills retraining and to upgrade across the entire occupational spectrum.

Investing in human capital is the priority to make the most out of this emerging evolving digitally-enabled economic opportunity. Numerous researches suggest; three types of skills are increasingly crucial in labour markets: advanced cognitive skills such as complex problem-solving, socio-behavioural skills such as teamwork, and skill combinations that are predictive of adaptabilities such as reasoning and self-efficacy. At the same time, Technology-related and non-cognitive soft skills are becoming increasingly more critical in tandem, and there are significant opportunities for innovative and creative multi-stakeholder partnerships of governments, industry employers, education providers and others to experiment and invest in new types of education and training provision that will be most useful to individuals in this new labour market context.

The core objective for governments, industries and workers and their trade unions alike should be to ensure that tomorrow’s jobs are adequately rewarded, entail treatment with respect and decency and provide realistic scope for personal growth, development and fulfilment.

The alternative workforce and new job structures need to enjoy social protection as evolved from the time of the First Industrial revolution. And the growing numbers of non-standard employees, gig-workers, freelancers out of social insurance and health care and marginalization is not acceptable.

The brief descriptions in the previous paragraphs highlight the challenges the professional and managers confronted within the transition to the future digital world of work. It is believed that the future is built upon the past, and trade unions have evolved since the first industrialization era to safeguard the rights of workers and fight for dignity and decency at the workplace. This function will not be automated, but we need to augment new trade union services to remain relevant to our members. If the Digital World is going to be our home; it is, we who should unite and make it.

**Professionals are in charge of their Careers**

For societies to benefit from the potential that technology offers, they would need a new social contract centred on massive investments in human capital and progressively towards universal social protection. Bio, Robo, Info, Nano and Energy technology is adapting and evolving at a rapid phase with the advance Artificial Intelligence led technology and machine learning abilities. Bioinformatics is enabling convergence between biologically and technologically driven algorithms.

Corresponding to the advancement of the physical technologies in the bioinformatics sphere the social technology that is essential to; govern, regulate, and society-wide fair usage is still in infancy. Wide-ranging questions are being asked about the role and impact of digital platforms, stretching from alleged anti-competitive conduct to privacy concerns, and from the disparity in media regulation to copyright issues. The Federal Trade Commission of the United States of America initiated an investigation into the Cambridge Analytica data privacy breaches enabled by the Social Media platform Facebook and imposed a fine of US$ 5 billion on 24th July 2019.

Observing the trends of technological impacts ADB reports; Technological change and rising incomes will lead to new occupations and industries, further offsetting labour displacement due to automation in the developing economies in Asia.

The new asset class that is expected to drive the productivity growth in the 4th Industrial revolution era are in knowledge and the human economy. Therefore, proficiency in new technologies is only one part of the skills equation, however, as ‘human’ skills such as creativity, originality and initiative, critical thinking, persuasion and negotiation will increase the value of professionals.

Similarly, attention to detail, resilience, flexibility and complex problem-solving skills will be in demand. Emotional intelligence, leadership and social influence, as well as service orientation, also see an outsized increase in demand relative to their current prominence. These soft skills need to be acquired periodically by the professionals to remain employable.

Table below highlights the threats to various professional careers impacted by the computer algorithms by 2033.

<table>
<thead>
<tr>
<th>Jobs that are at High Risk of Elimination</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Telemarketers and Insurance underwriters</td>
<td>99%</td>
</tr>
<tr>
<td>Sports Referees</td>
<td>98%</td>
</tr>
<tr>
<td>Cashiers</td>
<td>97%</td>
</tr>
<tr>
<td>Chef's and Waiters</td>
<td>96%</td>
</tr>
<tr>
<td>Paralegal Assistants</td>
<td>94%</td>
</tr>
<tr>
<td>Tour Guides</td>
<td>91%</td>
</tr>
<tr>
<td>Bakers &amp; Bus Drivers</td>
<td>89%</td>
</tr>
<tr>
<td>Construction Workers</td>
<td>88%</td>
</tr>
<tr>
<td>Veterinary Assistants</td>
<td>86%</td>
</tr>
<tr>
<td>Security Guards &amp; Sailors</td>
<td>84-83%</td>
</tr>
<tr>
<td>Bartenders and Archivist</td>
<td>77-76%</td>
</tr>
<tr>
<td>Carpenters</td>
<td>72%</td>
</tr>
<tr>
<td>Life Guards</td>
<td>67%</td>
</tr>
<tr>
<td>Archeologist</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Source: “The Future of Employment” - Oxford Researchers
Carl Benedict Fray & Michael A Osborne (2013)

UNI Apro Professionals & Managers group spot an opportunity for trade unions and professional association to invent new services to offer to attract and retain members amidst the threats. Lifelong and continuous learning needs to be backed by permanent trainers with adequate training facilities, expertise, competencies regularly.
Today’s skills will not match tomorrow’s jobs, and newly acquired skills may quickly become obsolete. The economic shifts brought about by the 4IR will have implications on employment and the type of skills required for the digital age. In the current 4IR era, employability must be a key component of education systems to avoid skills mismatches in the labour market. In this sense, close cooperation between businesses and relevant government agencies and institutions is vital to ensure that the curricula of training systems are in line with labour market needs.

The trade unions should find this space, as it is in their domain to collaborate with the different agencies to offer value-added services to existing members and potential members. If not, temporary work agencies are grabbing opportunities. At the Singapore Conference of Future World of Work, organized to commemorate the ILO’s anniversary in April 2019, speakers representing ADELL-CO and ACCENTURE the leading temporary work agencies claimed that they have trained and upgraded skills over 300,000 employees in a year.

Along with changing demographics, an increasing number of seniors – Silver Color- above the average retirement age of 65 are employed in the Organization for Economic Co-operation and Development (OECD) countries.

The engagement of seniors in the workforce dramatically increases the need for lifelong learning. The old model was that you learned once to work, and now we must work to learn continuously. The ability to adapt will be the most valuable skill in need which requires refreshing curricula to include skills needed in the future workforce - both digital as well as 'human' skills such as communication, problem-solving, creativity, collaboration and critical thinking.

UNI Apro Professionals & Managers group is confident that the trade unions with their wealth of experiences are capable of managing skill formations to explore the opportunities to remain relevant in the emerging digital world. Furthermore, to tap on their collective strength extended across interconnected professional organizations across regions to counter the threats for inventing better outcomes.

In this digital information age, one can witness multiple changes in one generation. The old model 30:30:30 years of learning, working and enjoying retirement is getting out of date and out of place. For the first time in history, that we have so many changes are occurring so rapidly in one lifespan.
Singapore being Asia’s technology capital, businesses in the city-state always hunt for diverse talents with specialized skillsets to run their global and regional roles efficiently. Also, Singapore maintains its position as a global innovation hub.

According to statistics from the Ministry of Manpower in Singapore, freelancers comprise nearly 10 per cent of Singapore’s workforce. Freelancers are increasingly sourcing for jobs from online and social media platforms. Many of them come from a different professional background, as well.

To be successful, organizations must take a holistic view of talent to have access to the right skills at the right time. To achieve an optimal blend of permanent and contingent workers, and also developing worker policies that can be flexed across today’s multi-generational workforce, to engage talent in meaningful ways adopting new perspectives for talent management becomes a necessity.

Nine to five jobs are disappearing, and finding a job for eight hours work also becoming challenging, yet everyone has to survive in a 24 X 7 economy. Parallel careers for professionals will soon become a new normal.

The growing mismatch between jobs and skills available; means professionals and businesses must focus on becoming more agile and responsive to economic and digital transformation - which can be achieved through a continued focus on professional development and hiring new staff with the right skillsets.

The workforce of the future must be equipped with the ability to apply and convert data into actionable, relevant and timely information that can positively affect business decisions in organizations. With the rapid adoption of AI-enabled technologies, whole industries and occupations redefined, and workers will need to adapt, learn and forge new career paths, the essential traits of the future-ready workforce will be: receptive to change, readiness to adapt, being relentless to learn.

Breaking the emotional barrier of the Professionals and Managers to gear for lifelong learning in search of the right kind of skills will be one of the sought after service from trade unions.

As experienced by many; no best institution can teach one who refuses to learn. Similarly, no worst uncertain situations can stop one from trying their best to succeed. Professionals and Managers trade unions will have to offer new trade union services to institutionalize lifelong learning thus securing employability for their members across various sectors.
In response to the digital technological advancement, the modern workplace and the workforce is continuously evolving. For instance, in Singapore, it is observed that the proportion of the Professionals, Managers, Executives and Technicians (PMET’s) are high in the workforce. Furthermore, many of them employed at a middle level low skilled high paying jobs are increasingly getting redundant. Labour movement in Singapore has worked together to amend the Employment Act enabling the core provisions of the act covering the PMET’s with effect from 1st April 2019.

The tripartite stakeholders in Singapore have introduced various programs to upskill employees continue to remain employable. Lifelong learning is becoming a fruitful area of experimentation, with several governments and industries looking for the right formula to encourage individuals to undergo periodic skills upgrading voluntarily. There is an obvious need to take personal responsibility for one’s own lifelong learning and career development. It is also equally clear that many individuals will need support through periods of job transition and phases of retraining and upskilling by governments and employers.

Setting up of a universal lifelong learning fund jointly sponsored by the tripartite partners will be a worthy option as a viable alternative for UNI Apro Professional & Managers group to consider. Just in time skills for professionals and managers are indeed the essential tool to make optimum use of the cutting-edge technology for value creation.

The process of job creation works society-wide—and not just for the few—only when the rules of the game are fair. Workers in some sectors benefit handsomely from technological progress, whereas those in others are displaced and must retool to survive. It will be hard for professionals to become Artificial Intelligence (AI) specialist overnight, but they must feel comfortable working in AI environments supporting a continuing role for creative human intervention rather than a technical expert. Platform technologies create massive wealth but place it in the hands of only a few people. Trade unions need to address this issue seriously, as they have the necessary expertise to deal with the problems.

Building A Future Ready Workforce with Future Ready Skills

◊ Ready for New Jobs
◊ Relevant with New Skills
◊ Resilient to New Ways of Working

What the Singapore Labour Movement is Doing

The Singapore Labour Movement is working with tripartite partners across 6 clusters on proactive actions that will translate into tangible efforts to help working people and companies adapt and grow under their respective ITMs.

[Industry Transformation Maps]

The 6 Clusters include:
- Trade & Connectivity, Lifestyle,
- Modern Services, Manufacturing,
- Essential Domestic Services and
- Built Environment

4th UNI Apro Professionals & Managers Conference should learn from the innovative Career Support Programs (CSP), and Professionals Conversion Programs (PCP) introduced in Singapore and adapt them in other economies across the Asia & Pacific.

UNI Apro Professionals & Managers group aims to engage all its affiliates to chalk out a strategy to come up with a work plan framework to lobby policy design to manage just transition for professionals and managers in the digital world. A mammoth task for trade unions as they now need to fight against the risk of their irrelevance, even as there is a growing un-working class neither in production nor unable to be a part of consumption cycles, but trying to survive in the 24X7 economy.