EXPLAINER

Future-Proofing the Workforce in the Age of Digital Disruption

The current technological revolution calls for more effective and innovative solutions to prepare a new generation of learners to adapt and manage new technologies for better education and labor market outcomes. Photo credit: ADB.
Soft skills, a growth mindset, mentorship, and internship can help current and future workers adapt to a rapidly changing workplace.

Introduction

Advances in technology like cloud computing and artificial intelligence (AI) are transforming world economies and reshaping how people work. By 2020, more than 800 million people will need to learn new skills for their jobs and two-thirds of students today will work in jobs that do not yet exist. Not only does this skills gap impact prospects for individuals, it has a systemic effect on the ability of companies, industries, and communities to realize the full potential of this digital transformation.? Addressing this issue ?involves changing the way people are educated ?and trained, and the way? companies hire and support their employees. Addressing the barriers while opening equitable opportunities requires a paradigm shift in our education and work force systems.

What should be done to substantially raise learning outcomes? What are the foundation skills that are becoming more relevant nowadays? How can these skills be highlighted in the curriculum? These are

some of the questions that education systems should work on in order to produce graduates that meet the skills required in today's market. These are human resources that are resilient, enduring, trainable, innovative, creative, and have the mindset of entrepreneurship and sustainability. Government and private institutions should also consider technologies that transform teaching and learning. For example, integrated and customizable learning management systems and other platforms can enhance education through their capacity to raise the quality of teaching, personalize learning, track performance, provide continuous learner feedback, and assess the effectiveness of learning materials.

Likewise, companies should look at how they can leverage the current technological advancement to better inform and update their onboarding and other training programs. As market experts, these companies can also lead the way to help education systems to close the skills mismatch. For example, Microsoft's Skills and Employability Program invests across the learning continuum – from increasing participation in digital literacy and computer science education to technology career discovery to supporting skilling and the attainment of technical credentials for in-demand jobs.

At the 8th International Skills Forum, Aleandre Kwan of Microsoft Philanthropies Asia further shared how schools and companies can help individuals remain competitive and relevant.

What kind of skills do we need to teach students to prepare them for jobs in the future?

According to the World Economic Forum, 1.8 new jobs will be created for every job that is displaced by artificial intelligence. Surprisingly, only 20% of these jobs will require the technical skills needed to create and use AI itself, while 60% will require interpersonal or distinctly human skills, such as collaboration, creative thinking, problem-solving, communication, and leadership. When the youth of today graduate, they will enter a world that is completely different from anything that the previous generations have faced. Tomorrow's world of work remains unknowable. However, equipping them with soft skills that will make them agile learners will help them adapt and excel in the job opportunities of the future.

How do you nurture innovation and creativity in school and the workplace?

Nurturing innovation and creativity means instilling a growth mindset. Schools and workplaces need to become safe environments for both learning new things and using failures as foundations for success. Efforts that will encourage dedication, discipline, hard work, and lifelong learning are encouraged.

In schools, teachers must adapt with today's youth, who are digital natives. They should leverage the use of technology and communicate in a way that does not intimidate.

How can workers, including teachers, upskill or reskill?

There are a lot of available resources that one can use to sharpen their skills. Applying a growth mindset, staying motivated to become better each day, and unwavering love for learning will lead to better results. At the same time, there is the imperative from the employers themselves to help support their employees to reskill and to upskill through training, mentorship, and other learning opportunities.

What initiatives does Microsoft have to make going back to school easy for these people?

Initiatives under Microsoft Skills and Employability Program highlight the value of digital literacy and upskilling.

For example, Microsoft Cyber Shikshaa reskills and upskills female engineering graduates and female IT professionals from tier 2 and tier 3 cities in India through a very intensive 4-month training program. They are then placed in the Microsoft partner ecosystem so they can work as a cybersecurity specialist. This program aims to have 1,000 graduates over the next 3 years.

Meanwhile, Empowered Japan is a Microsoft program that helps prepare mothers who are returning to the workforce to upskill and get relevant job experience in the IT sector through apprenticeships within the Microsoft partner ecosystem. The training program includes both technical and soft skills training, building the confidence of women to participate in the labor market, and engaging employers on developing skills-based hiring practices. In 2019, the program will expand to 5 cities and with investment from the Ministry of Health Labor and Welfare for Saga city and Ministry of Internal Communications for Okazaki city.

Focusing on upskilling to the truly relevant technical skills that the industry requires, engaging employees to come on board as mentors, and providing internship programs where participants can practice what they learned are keys to these programs' success rate.

Resources

ADB Knowledge Events. 8th International Skills Forum: Future of Skills and Jobs in the Age of Digital Disruptions.

B. Panth. 2019. 3 Ways Asia Can Inspire Learning through Skills, Tech. *Asian Development Blog.*

Microsoft. Philanthropies Asia.

AI for Societal Impact Challenge. Founding Partners - Microsoft.

Aleandre Kwan
Regional Program Manager, Microsoft Philanthropies Asia

As Regional Program Manager, Aleandre Kwan manages Microsoft Philanthropies' Skills and Employability program in 18 markets in Asia. The global program invests across the learning continuum – from increasing participation in digital literacy and computer science education to technology career discovery and supporting skilling and the attainment of technical credentials for in-demand jobs.

Follow Aleandre Kwan on

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Mr. Panth provides technical leadership to the education sector group, leads the preparation of the group's work plan, mentors project teams, and facilitates collaboration across sector and technical groups in ADB and with external partners, particularly for innovative projects. He has over 25 years of experience in education, including sector assessment, project processing, implementation, evaluation, and policy dialogue, covering primary, secondary, TVET, and higher education. He holds master's and doctorate degrees in Education Administration, Planning, and Social Policy from Harvard University.

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