

MODULE 5

CRITICAL SKILLS OF THE FUTURE

With the age of automation and artificial intelligence catching up, future seems uncertain, if anything. With this module, we will guide you in identifying critical skills that your child can develop and be future ready.



Section – A

The Future of Jobs

As per the World Economic Forum’s (WEF), “Future of Jobs Report 2018”, the dawn of Artificial Intelligence (AI) and Automation is definitely going to result in more job creation. But it will have an impact on certain worker groups globally who would be required to proactively develop newer skill sets in order to stay relevant.

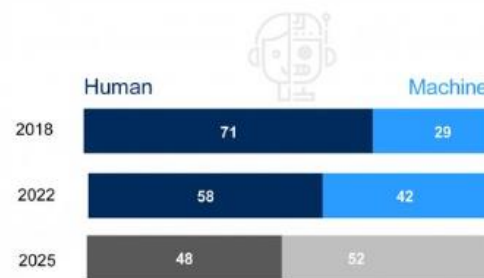
We have a Fourth Industrial Revolution upon us with the period from 2018-2022 signaling a development in the following domains:

- High speed mobile internet
- Big Data analytics
- Cloud technology, and
- Artificial Intelligence

In the figure (inset) the different types of technologies have been listed which firms across the globe would be adopting by 2022 with Big Data analytics leading the pack.

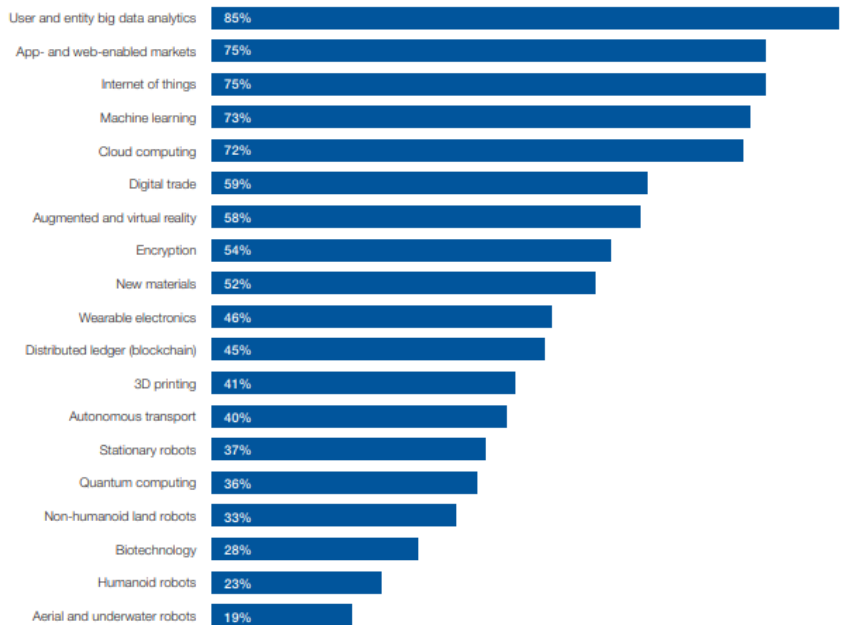
Rate of automation

Division of labour as share of hours spent (%)



Source: Future of Jobs Report 2018, World Economic Forum

Figure 2: Technologies by proportion of companies likely to adopt them by 2022 (projected)



Source: Future of Jobs Survey 2018, World Economic Forum.

Jobs would be impacted as well, with routine jobs as well as middle skilled white-collar roles like:

- Data entry clerks
- Accounting and payroll clerks
- Auditors
- Bank Tellers and cashiers
- Administrators, and
- Executive secretaries, becoming susceptible to the emerging technologies.

But there is a Bigger and Better news awaiting for:

- Data Analysts and Data Scientists
- AI and Machine Learning (ML) experts, and
- General and Operations Managers
- Sales and Marketing professionals
- Software and application developers and analysts, as these jobs would be receiving a big boost from 2018-2022.

Let us have a look at these high-growth jobs in some more detail.

- **Data Analysts and Data Scientists:** Touted as one of the Top jobs to work, the roles vary depending on the industry type. The job would primarily comprise of extracting and interpreting meaning from data. As simple as it may seem, this comprises of a number of complex process like structuring the data, validating the data and analyzing them to identify trends.
- **AI and ML experts:** AI is an offshoot of Computer Science which aims at the creation of intelligent machines that mimic humans and within AI lies ML which aims to create systems that can work with minimal human intervention and can learn from data and identify patterns. A classic example of AI and ML in action is the creation of driverless cars and with giants like Google investing on this front, this area is only bound to increase.
- **General and Operations Managers:** These human skills based roles comprise of planning, directing and coordinating operations for a firm. Their roles may also comprise of formulating policies, managing day-to-day operations and resource planning.

- **Sales and Marketing professionals:** Based on human touch, both these job types are quite different in nature. A Salesperson primarily sells a product or a service to clients and is expected to convert leads into actual purchasers through his or her skill. A Marketer is involved in communicating the value of a product or service and assist in building a firm's brand.
- **Software and application developers and analysts:** Based on technology, these roles are expected to hit the roof when it comes down to skill demanded by the industry. Software developers create specific applications that enables us to perform a certain task whereas an application developer makes computers perform certain tasks based on certain specifications. Last up are application analysts who are primarily responsible for the administration, monitoring and maintenance of software applications.

As per the WEF report, the following job roles are expected to make it big in India in the years to come:

Managing Directors and Chief Executives	Data Analysts and Scientists
Sales and Marketing Professionals	Assembly and Factory Workers
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Human Resources Specialists
Software and Applications Developers and Analysts	Financial Analysts
General and Operations Managers	Financial and Investment Advisers

Section – B

Critical Skills to inculcate in every child

This section helps you in identifying the critical skills that your child can pick on to ensure a brighter future ahead. So make a note of all of these 21st century skills right now!

- **Problem Solving:** This skill has been talked about a lot and has emerged as one of the top skills that your child should have. Through this skill, your child will learn to focus on the problem at hand, the process to be taken to resolve it as well as the final outcome. When your child will align himself or herself to a problem that is close to their heart then they will be actively geared towards finding the solution to the problem at hand.

- **Creative Thinking:** This skill will enable your child to view concepts, problems and their solutions in a completely new light thus prompting innovation. Creative Thinking is based on realization of what worked best but having that curiosity to question if that can be improved in a manner that results in an improvement of self and the situation at hand.
- **Collaboration:** Aimed to promote teamwork, this skill will ensure that your child becomes a better team player and aims to derive the best possible results in any given situation. Willingness is the key part of becoming a collaborator.
- **Social Skills:** Another key skill which ensures better success for your child. Social skills are key when it comes to making long lasting relationships. If your child loves to make new friends and tries to stay in touch with them, then you have a social butterfly at home but if that's not the case then politeness, etiquettes and learning how to make small talk can do the trick!
- **Adaptability:** As literal as it can get, this skill implies to be able to gel with the changing circumstances. This skill inculcates a sense of humility and acceptance to the fact that learning is always on. Your child needs to know when to change, how to change and how to react to change.
- **Communication:** This is essentially the glue that binds all the other critical skills together. It basically means to be able to express ideas or thoughts among a group of people. One of the most direct applications of this skill is while working on a project in a team setup. If a team doesn't communicate, they might end up risking the project for a failure.

We hope this section gave you some critical insights on the changing landscape in the years to come.

Now let us move to the last section of this module which will help you in exploring the outlined curricula choices and their value add in developing critical skills.

Section – C

Curricula and Critical Skills

Let us start off with Cambridge International which forms an integral part of the International curricula for Indian students.

Cambridge International through its curriculum ensures that students develop high order thinking skills like critical thinking, collaboration and creativity while gaining in-depth subject knowledge. Through its active learning approach, students are enabled to become more confident and responsible while being innovative and creative in their approach towards education. There are a number of innovative subjects that are offered under the Cambridge International curriculum like Cambridge Global Perspectives and Enterprise and Media Studies which will enable your child in developing critical skills. These includes prompting your child to create their own media products or set up his or her own enterprise and bringing in a hands-on approach to education.



CBSE curriculum which has been focusing aggressively on teacher development to prepare them to incorporate the best in education in their own classrooms. In addition, the board is also offering a large range of subject choices inclusive of skill building subjects at the Grade 10 and Grade 12 levels thus ensuring that students are job ready and better prepared to address the challenges of the future.

We hope you gained critical insights to ensure that your child is future ready and ahead of the competition!

Additional References & Reading Material

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