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## Reskilling and Upskilling : To Stay Relevant in Today's Industry

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### Abstract

The rapid modernization and influx of various new technologies and methodologies currently being employed today greatly and continuously changes the definition of professional competence expected of employees that work for companies that are directly or indirectly impacted because of these advancements or changes, this creates a demand for new jobs requiring new skill sets and so, one finds that in order to keep relevant to the workforce, refreshing and adding to one's skill set has become a necessity. Candidates thinking about entering the job market need to possess the right kind of skills for the right kind of job and the currently employed need to pick up new skills to stay relevant in the industry when new technologies are introduced so that they can contribute towards further growth towards these advancements. It then becomes important to combat this problem while retaining current workforce. This is where *reskilling* and *upskilling* act as essential tools. The aim of this paper is to create awareness about the industrial trends observed in the market and opportunities for employers and (potential or current) employees in today's industries to create a well-trained workforce and an enhanced environment that will benefit both organizations as well as individuals.

### Keywords

reskilling, upskilling, workforce, technology, industry

## **Introduction**

As stated in the report on the future of jobs by the World Economic Forum in 2018, around 75 million jobs will be lost in 20 major economies by the turn of the coming year. At the same time, all of these technological advancements and ongoing digital transformation are predicted to result in the creation of 133 million new jobs. Companies that rely heavily on operations have come into a new era of automation and digitization. This in turn has a significant impact on the talents they will require in order to stay competitive. It is primarily lower-skilled jobs that are being replaced by machinery and automation. If a firm which is mainly production line based does not replace human labor that does the repetitive tasks with newer technology, it is bound to suffer a loss as a result of competition from other companies that have a clear cut advantage using them. Hence, it is impossible for major businesses to stay away from technological advancements. Low-skilled employees will be the most at risk to lose their employment as a result of this change. Technology helps in boosting productivity, easing the strain on human labour, and eliminating their need to do repetitive activities. Workers will need to learn newer and up to date skills in order to stay employed. All that is required is that people receive training for the newly established job roles. We can take advantage of the influence of technology on jobs if the government takes care of reskilling low-skilled employees. Many tasks that once required humans can now be completed by machines thanks to technological advancements. Many researchers on the subject have the forecast that the fourth industrial revolution or the second machine age will have a disruptive impact on the way we work with technology and on the general workforce. Brynjolfsson and McAfee say, “technological progress is going to leave behind some people, perhaps even a lot of people, as it races ahead”. And so, one can say that now is the worst time to work with regular abilities as digital technologies are gaining the capability to do the same at an astounding rate [Bissell 2020]. In the future years, the automation revolution will have a significant impact on employment. Almost every profession will change, many of them drastically, and the vast majority of the present workforce will need to learn new skills. Preparation to meet future demands is a vital assessment for businesses but is seldom thought about. The COVID-19 pandemic has hastened the shift to the automation revolution due to restrictions as well as increased demand. Companies are responding to this crisis by entering a world of physical separation in the workplace and significant shifts in customer behavior and expectations. Organizations are being forced to rethink their operations in order to prepare for the new normal. Companies in the manufacturing industry are reorganizing their supply and production chains. Digital customer experiences and smart or contactless operations are becoming more important to service firms. These developments will have a considerable impact on workforce skill and capability requirements, ranging from dramatic increases in home and remotely-based work to the need for shop-floor staff to learn new skills

and revise newer health and safety regulations. Manufacturing, transportation, and retail, as well as operations-related vocations like maintenance, claims, warehouse order processing and picking, will see more change than the worldwide average since they frequently employ large numbers and because many operational duties are predictable and repetitive, they are well-suited to automation or digitalization. This will and has very rapidly been noticed to give rise to skills gaps which is basically the difference between the kind of skills that employers need for the employees to possess and the skills that the job seekers or employees actually possess [Gallie 1991]. With the technological change of jobs in the Fourth Industrial Revolution, more than 1 billion people must be retrained by 2030. It is estimated that by 2022, the basic skills required for 42% of existing jobs will change and now is the time to understand the importance of getting reskilled and upskilled if one needs to retain his position at workplace [Zahidi 2020].

### **Three societal trends and their implications**

As the world witnesses technological advancements every single day, there are three main kinds of industries that need to be talked about, ones that are getting created in synchronization with the changes which definitely are the ones that are coming up with the need for new skills to be fully functional and operational and people who are yet to enter the job market need to realize the impact of the new industries that enter these sectors. A potential employee not only must be aware of the kind of expectations that the employers will have but must have the right skills for the kind of job they want to do. It is bizarre to expect for the candidate to be new-industry-ready after pursuing some bachelors or masters whose curriculum barely gets updated every year to cater for an industry that got created overnight. The cryptocurrency and blockchain industry are one such example. Blockchain was a brand-new technology when it was discovered. As a result, it is classified as an invention rather than a finding. It incorporates advanced mathematical principles as well as numerical methods. Blockchain is a system wherein data is saved in a way that it becomes next to impossible to alter, hack, or tamper with. It is a digital list of duplicated transactions that is distributed across the blockchain's entire network which is of different computer systems. Whenever a new transaction takes place using blockchain, a record of that transaction is provided to each participant and there is a fixed number of transactions allotted to each block that is a part of that network or chain. Meaning, if any of the blocks of the chain was changed, it would be apparent that it has been meddled with. If someone, say a hacker wanted to meddle with a blockchain system, it would require changing every single block in the chain, across all of the distributed versions of the chain itself. The use of blockchain makes it possible for you to have total control over your assets. Even though a public blockchain is autonomous and a private one requires some authentication it still greatly reduces the use and need of a centralized control since

transactions are logged by an immutable cryptographic signature called a hash and only that. The identities of participants are either fully anonymous or partially. The use of blockchain is not only secure but has improved speed and efficiency. It solves various processes that are time consuming and automates transactions to maximize efficiency and thereby with the help of automation, eliminates human errors that tend to take place in these processes.

Secondly, there are industries which are getting disrupted. One disruptive technology is the introduction of Netflix and its streaming services, these made it possible for the consumer to get video on demand at the comfort of his or her home via delivery service and eventually a streaming medium. This led to the demise of many DVD rental stores and giants such as Blockbuster that once led the entertainment on-demand industry. Once Netflix started to offer its services, consumers found it inconvenient to make frequent trips to the nearest DVD rental store, at the same time not having the guarantee that the particular title that they wanted would even be there. Not only this, but the fact that one does not even need a set-up, a DVD player to stream. No need to download hence no need for storage, instant playback are all really big advantages. The convenience and ease of streaming via the internet allowed Netflix and other streaming sources to eventually take over.

Then there are those which are not harmed but only need to evolve for the better and people working in such industries are going to require better, more complex skills today to be able to do the same job tomorrow. Uber Technologies (UBER) is one of the most exciting firms to emerge in the last decade, thanks to its fast expansion and continual controversy. The global ridesharing app, which was launched in 2009, has gained a lot of traction. The app users can call on a car service from any location and have it arriving on demand, rather than chasing a cab on the street or contacting and waiting for a cab service. It made it incredibly simple for people to get a ride or hire a cab. The prices were made dependable and fixed according to the distance travelled and surge pricing due to peak hours. The drivers offering the cab services have registered their identities before getting access as an uber driver and so the cab you get from the uber app is not a random stranger on the street that you will normally have to travel with if you take a cab from the road, making uber a much reliable and safer option. This did not put cab drivers out of business; they just needed to become a part of the technological change.

### **Literature Review**

To be simply put, reskilling can be defined as the process of learning or teaching an individual an entirely new skill in order to move to another area that demands new skills and resources whereas upskilling is the process of providing someone such as an employee with more advanced abilities, through more education and training. As a result, the group gains greater experience, knowledge, and a higher

level of productivity. Leading companies are putting a lot of emphasis on upskilling sessions, training modules, and short-term courses these days to improve their employees' abilities and performance. Upskilling refers to a constant and indefinite learning process; nevertheless, there may come a time when it is necessary to pursue new process training, new subjects, and disciplines, which leads to Reskilling which causes one to learn new abilities while forgetting previous ones. It's the equivalent of teaching a chef how to code and a surfer how to paint. It also eliminates the need to acquire a new employee to fill any skill shortages, since the employee should be able to manage current and future changes in their work position after upskilling. As of today, reskilling the workforce and potential employees is becoming increasingly relevant with the pace of introduction of new technologies and the ever-rising demands of consumerism.

In 2019, PricewaterhouseCoopers; a multi-national company that provides its services to more than 80% of the Global Fortune 500 companies, announced a three-billion-dollar investment on training and development programs for existing employees. Joe Atkinson, the vice-chair, claims that employees not only get to apply their new skills but also learn from one another in the process.

In the modern age of technology and automation, an assurance is that while jobs will be both made redundant as well as created, any individual regardless of age will either be required to reskill or upskill one's expertise. Performance reviews work well to pick areas of work and talent mobility programs allow the employer to receive the possible skills the employee wants to develop and then appropriately place him in an area that will produce the desired results.

A new era of Artificial intelligence (AI) is rising and peeking through the horizon, it is affecting the future of almost every single person and every sector in the market today. AI has acted as the driving force behind all of the new up and coming technologies such as big data, robotics, and the Internet of Things, and it will continue to do so for the foreseeable future. According to Stephen Hawking, a world-renowned theoretical physicist, this can prove to be of ultimate benefit or for our worst. According to Forbes, over 47 percent of employment fall into the "high risk" category, making them the most vulnerable to "automation." The figure may vary, as it is influenced by various elements such as the industry's budget, rules, political attitudes, and professional viewpoints, and, of course, social resistance, according to "The Economist." The "reskilling" of those who have already embarked on their journey into the world of technology will help them not only to come across new ideas, thereby developing R&D, but also to reduce the degree of "vulnerability" that their job may face in the future if they do not equip themselves with the latest trends and stay up to date with the latest happenings in AI town. Hence, organizations are tasked with the need to keep their work force up to date with what would come next.

Automation tools and artificial intelligence constantly change the way products are developed, delivered to consumers which go hand in hand with various changes to the way people work and what is demanded of potential employees when they apply for a job. The big change is already underway with the world well into Industry 4.0, which has changed the way modern work environments see various factors such as producer to consumer interaction, production, division of labor, all owing to the concepts of big data analytics, the internet of things and automation in the workplace. It is paramount that workplaces and prospect employees today are flexible enough to pick up these new tricks of the trade as they come along, lest fall behind [Chakma, Chaijinda 2020].

According to Microsoft, 150 million new digital jobs will be created in the next five years. It may have contributed to the fivefold increase of enterprise learners on Coursera, a well-known online learning site that has garnered a lot of traction in the last year. Professional Certificates, such as Google IT Support, provide employees with the most up-to-date digital abilities. These entry-level Professional Certificates allow anyone without a college diploma or prior experience to obtain the necessary skills for in-demand digital careers totally online in as little as three months. It is no surprise that skill-based education is more successful and purpose-driven, providing students with a defined goal. It's the ideal blend of beliefs, values, and routine to build a strong foundation. It cultivates the art of learning and growth, giving students exactly the kind of tools that they need to gather all the knowledge there is in their chosen sector. The labor market is evolving and one major concern at stake is whether educational institutions are producing the information and skills that companies are seeking, whether the education system provided is capable of producing the requisite knowledge and skills, or whether other institutions (such as the family or the labor market) are more effective at doing so. That is a valid question, but history has time and again shown how difficult and time-consuming it is to make a change as big as this on an institutional and national level and that also does not come with a guarantee especially in a country like India. Instead of waiting till that change comes along, the best thing to do would be to take the responsibility of the situation and to find your own transport to keep up with the rapid advancements. As mentioned before, many people have already found theirs and have signed up on online learning platforms and for self-paced courses on the newer technologies that many companies are moving towards employing. While the credibility of what someone has learnt online might be questionable it is still a valid move, a step towards learning something new which is far better than someone who has stuck to the traditional concepts which he may or may not require in the industry for the role he is looking for. There are two significant changes here: the shifting occupational structure and the growing demand for reskilling and upskilling as a result of technological advancements and flexibility. Rapidly increasing technological

change is modifying jobs, workplaces, and occupations. Low-wage workers are often more susceptible to these changes, and labor experience enhancement and development plans are usually not designed to address the difficulties faced by them or meet their needs. Workers can benefit from both user-centric skills retraining organizations and also from progressive guidance on job market opportunities for their current skills and experience [Escobari, Seyal, Meaney, 2019].

As we all know at this point, many employees have had to modify their working habits in order to meet COVID's demands. Definitely there are some people for whom requiring to learn a new technology after being forced to work from home has been a challenge. Such problems may be handled by upskilling, which is excellent news since production will not suffer. The company may carry on as usual and stay competitive in the marketplace, and the individual can maintain his or her job. But perhaps one of the most dramatic impacts of the COVID-19 pandemic has been the indefinite numbers of employees who got laid-off initially. At that point in time when the biggest of companies were finding it hard to hire new talent it automatically became extremely important to invest in the workforce that was already there so as to be able to keep up with the industry trends. While there have been numerous discussions on how to use technology to improve workplaces, businesses need the knowledge and experience to make the transition to a distributed workforce model. The situation, however, with the Covid-19 pandemic, has changed and business models like these are no longer a luxury but a must. And any company or industry that does not adhere to this new normal will fall behind at some point if not immediately. Understandable, that for firms attempting to manage their budgets in this climate, training employees who have already settled in may not appear to be a priority, yet the reverse is true. Companies who invest time and resources in training will be better protected during COVID and beyond.

Performance enablement is a crucial tool that allows the overall enhancement of professional competence offered by the employees and helps in the making of a workforce that is agile and adaptable to the rapidly changing industry trends. Workforce training directly or indirectly serves as a chance to explore employee potential to maximize the output from each and every single one. Reskilling and upskilling are not only relevant for the pandemic-situation, but it also makes way for the new and emerging job roles that the world will witness. According to Dell, 85% of the jobs that will be essential roles have not even been invented yet. How to then prepare for a problem without knowing what it is. Although the future is unclear, there is plenty that companies can do to protect themselves and their employees as a precaution. The need to reflect on the kind of skills one possesses and the ones that the industry will require is very important to study if one wants to make a significant contribution to the advancements that are introduced every single day, be it in the field of medical or technology.

When a company invests in human capital the value that the human resource becomes capable of adding increases. Such an investment does not only help the company to become more efficient but also increases employee satisfaction which directly affects their commitment towards what they are expected to do and their loyalty towards the company as it only proves that the company cares about the professional and overall growth of the employees that make up the company. Employees who are happy build a cohesive and developing work environment in which they successfully strive to achieve corporate goals. It is also observed that many employees value career growth and development opportunities more than an increase in salary. In fact, employees are significantly less inclined to move to another company if they are given help for professional development. Although not every employee will welcome additional training, the seeds may be planted early on in their career. They will be less resistive when relevant training is given if you encourage them to identify the skills and abilities they wish to gain. The company will also have an idea of the kind of jobs their workers might be able to do in the future. Most employees prefer to work for companies that invest in their professional growth, and they will not search for other jobs if they believe their present employer meets this requirement. It has been proved time and time again that investing in human capital enhances an organization's Return on Investment. Employees are motivated by monetary and non-monetary incentives in a good investment which makes them want to stay for longer. Moreover, it has been observed that workers who have evolved as part of technological change continue to see increases in wages and occupational scale. [5] Companies must give considerable upskilling and reskilling chances if they are to keep their best professionals, aside from employee benefit necessities such as healthcare, paid time off (PTO), and stock options, as the global business landscape changes fast. Only employees with the most required skill sets both technical and behavioural competencies, can guide organizational performance in the correct direction as business models evolve and technology becomes more prominent.

For generations, it has been seen that people first spend a third of their lives obtaining the college degrees they need to find work. These degrees can be said to be “the stamps” on their white-collar passports that allowed them to continue the second half of their adventure. This suggests that the nature of work that people pursue, as well as the skills and knowledge necessary to make that happen, remains unaltered for the rest of their lives which is no longer the case. While parents of people who are currently in their 40s, 50s even, have had parents who held on to one job for the rest of their life and that worked out just fine for them, the same is not true for the generations after that. All of the technological changes especially are proof that if one does not adapt to the new normal, he will most likely have to step out otherwise he will be causing hindrance to the growth of the company as well as those around. The COVID-19 slump provides enough incentive to act in

large numbers, and to act quickly. While the epidemic has had a disproportionately negative impact, we have observed a link between unemployment rates and educational attainment and with there being new job roles introduced in the market clearly, occupational skills will be more important than academic degrees in the future. As data suggested by the World Economic Forum's Jobs of Tomorrow report of 2020, there will be a surge in jobs in the big data and Artificial Intelligence economy, as well as new opportunities in the engineering sector, cloud storage and computing, product designing as well as creation. These professions require people with appropriate abilities, which can be learned even if you don't have a college diploma. Skill-based education is no longer a choice, but rather a necessity. Despite the fact that the population is increasing, there is still a significant gap between education and employment. This is called the skills gap, which is basically the difference between the kind of skills that employers need for the employees to possess and the skills that the job seekers or employees actually possess and the only way to overcome that is by reskilling and upskilling. It is important to realize that companies are always on the lookout for candidates who have the requisite skills, and that possessing a degree makes you educated but possessing the skills make you employable. It is also important to remember that only the nature of work is changing as a result of technological advancements. Even while some occupations will become obsolete as a result of technological development, it has the ability to generate many more jobs than it eliminates. The promotion of disruptive technologies associated with the industrial revolution or "Industry 4.0" is reshaping the manufacturing and production line environment, reducing the need for low-skilled activities, and increasing that of high-skilled activities. These trends in the technology sector are affecting the entire employment dynamic right from the job profile to the skills required and expected from the workforce, and adequate training courses are needed to meet the needs for further education and retraining [Pontes, Gerales, Fernandes, Sakurada, Rasmussen, Christiansen, Hafner-Zimmermann, Delaney, Leitão, 2021]. The requirement of the hour is continuous learning and upgrading of abilities so that one can sustain and secure their position in the job market by contributing in a way that is significant for growth, economical for the company and personally for the employee. As Alvin Toffler, a very well-known writer and businessman has rightly put, "The illiterate of the 21st century will not be those who cannot read and write but those who cannot learn, unlearn and relearn".

## **Conclusion**

The way that economic development impacts the degree of competence and the classification of skills as observed within the working class of the population has been a fundamental issue of social assessment of labor and work organization. One approach to look at this would be to acknowledge that technological development

of the “advanced” industrial societies implies firmly more complex types of work tasks and therefore demands for a significantly higher level of skill. This results in a shift in the overall occupational structure of the workforce and also leads to skill increases within occupational categories and on the other hand, there is the “pessimistic” way which suggests that majorly, the inclination is towards a decline in the real “skill content” of jobs. The growth of non-manual or unassisted occupations has been accompanied by a profound internal transformation, as this type of work has become more central to production, it has been greatly automated, mechanized, and routinized. The automation undercuts traditional skills which reflects in the decline of pre-job training times. Companies and employees need to navigate the ever-changing technologies and organization leaders are tasked with reskilling and upskilling the workforce and preparing them for future demands. As recent trends design and change requirements of jobs, it is the individuals that are required to embrace this idea and motivate oneself to make learning a priority. Old notions of teaching with current circumstances and demands may be too slow and unsuitable to keep up with how rapidly the demands come up. Reskilling and upskilling will allow for survival in this ever-evolving technological space.

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