

SHRI RAM COLLEGE OF COMMERCE

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STRIDES - A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE

VOLUME 5 – ISSUE1 & 2

JULY 2020 - JUNE 2021

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Recycling Hoax Ashish Kumar

The Role of Corporate Social Responsibility towards Sustainable Education with reference to the FMCG Companies Nikunj Singhal & Aastha Garg

Covid-19 and Mental Health of Adolescents Dipali Nishad

Cryptocurrency- The Rise of Tokens Aayush Jain & Ishika Kamani

Population Trends in India: Demographic Dividend or Demographic Drag? Nirikta Mukherjee

An Analysis of Thrift Industry in India Pragati Agrawal, Tanya Goel & Prachi Yadav

Discussion of the Link Between Air Pollution and Economic Growth in Indian States Rajsi Sah & Prachi Yadav

The Nexus Between Economic Growth and Public Outlays and Deficits in India: An Econometric Analysis Somya Garg

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5

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STRIDES - A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE ISSN 2581-4931 (Print)

Shri Ram College of Commerce is well known for its academic excellence and dedicated approach towards dissemination of knowledge in the academic world. The college appreciates the role of research in education and is committed to developing an inclination towards research in both faculty and students. In this pursuit, the college has taken the initiative to launch a new Journal named 'Strides - A Students' Journal of Shri Ram College of Commerce'.

ABOUT THE JOURNAL

It is a double blind reviewed bi-annual Journal launched exclusively to encourage students to pursue research on the contemporary topics and issues in the area of commerce, economics, management, governance, polices etc. The journal provides an opportunity to the students and faculty of Shri Ram College of Commerce to publish their academic research work.

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- 3. Abstract
- 4. Keywords

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Endnotes should be serially arranged at the end of the article well before the references and after conclusion.

ii

Table, Figures, Graphs

The first letter of the caption for table, figure, graph, diagram, picture etc. should be in capital letter and the other words should be in small letter - e.g. Table-1: Demographic Data of Delhi, Figure-1: Pictorial Presentation of Population etc.

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Principal's Message



To achieve and promote excellence in research and publish quality academic as well as educational resources as guided by the Mission Statement of the College, Shri Ram College of Commerce had launched a Journal, "Strides- A Students' Journal of Shri Ram College of Commerce" on the occasion of 91st Annual Day of the College held on 13th April, 2017. The Journal was released by then the Hon'ble Union Minister of Human Resource Development, Shri Prakash Javadekar. The Journal publishes the research papers and articles written by students of the College under the mentorship of Faculty Members which go through an intense review mechanism before getting published.

Through the Journal, students get an excellent platform to enhance their research calibre, display their academic perspective, and practically apply their classroom learnings to real-world situations. The present Issue includes several multi-disciplinary and contemporary topics such as "Effects of Globalization on the Indian Health Sector", "Will America Sustain the Wave of Automation?", "Recycling Hoax", "The Role of Corporate Social Responsibility towards Sustainable Education with reference to the FMCG Companies", "COVID-19 and Mental Health of Adolescents", "Cryptocurrency-The Rise of Tokens", and "Discussion of the Link Between Air Pollution and Economic Growth in Indian States".

I wholeheartedly congratulate the Editor, Strides, Dr. Rajeev Kumar and students whose research papers got published in Volume 5 Issue 1 and 2 of the Journal. Simultaneously, I encourage more students to contribute their research papers for the successive Issues.

My best wishes for your future endeavours!

Prof. Simrit Kaur Principal



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Editor's Message

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To maintain high academic standards, academic ethics and academic integrity, a rigorous process of double-blind review of research papers is followed along with screening of plagiarism of each manuscript received by the COPE for



publication. The research work published in Strides is absolutely original and not published or presented in any form at any other public forum.

The foundation issue of the Journal "Strides - A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17" was successfully released on 91st Annual Day of SRCC held on 13th April, 2017 by Shri Prakash Javadekar, Honb'le Union Minister of Human Resource Development, Government of India. The successive issues of 'Strides - A Students' Journal of Shri Ram College of Commerce' have been released biannually. However, due to the COVID19 pandemic and ensuing lockdowns the current issue has been delayed.

I congratulate all the students whose research papers are published in this issue of Strides and express my sincere thanks to their mentors and referees.



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STRIDES - A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE

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RESEARCH PAPERS

Effects of Globalization on The Indian Health Sector Vidhi Sethi	1
Will America Sustain The Wave of Automation? Anmol Bhagat	17
Recycling Hoax Ashish Kumar	37
The Role of Corporate Social Responsibility towards Sustainable Education with reference to the FMCG companies Nikunj Singhal & Aastha Garg	57
Covid-19 and Mental Health of Adolescents Dipali Nishad	77
Cryptocurrency- The Rise of Tokens Aayush Jain & Ishika Kamani	93
Population Trends in India: Demographic Dividend or Demographic Drag? Nirikta Mukherjee	.115
An Analysis of Thrift Industry in India Pragati Agrawal, Tanya Goel & Prachi Yadav	139
Discussion of the Link Between Air Pollution and Economic Growth in Indian States Rajsi Sah & Prachi Yadav	163
The Nexus Between Economic Growth and Public Outlays and Deficits in India: An Econometric Analysis Somya Garg	181



Anmol Bhagat B.Com. (Hons.) SRCC, DU



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Will America Sustain The Wave of Automation?

ABSTRACT

Artificial Intelligence is at its peak and it's growing day by day. The expansion of AI and Robotics has reached in each and every profession and AI has taken those jobs which were previously considered uncomputerizable. The paper takes you through historical references of automation and how the transition took place at that time. The effect of the CoronaVirus pandemic on Business automation and how it will shape the future of jobs is also taken into account. The Critical analysis of The United States on ARI (Automation Readiness Index) tests the capability of preparing its workforce for the coming wave of automation. The paper proposes the necessary changes in the Education policy of The US which should be implemented to reduce the job loss of workers

Keywords: Automation, AI, Education, Labour, Future, Skills.

INTRODUCTION

"Public discussions around unemployment typically focus on weak demand and outsourcing to developing countries, with limited attention given to structural changes in the economy that result from technological development" (Brynjolfsson & McAfee, 2011). Technological developments are always seen as a staircase for the development of a nation in all sectors i.e. Health sector, Education Sector, etc.

"Artificial Intelligence" (AI) – a term that was first used in 1956 by computer scientist John McCarthy during a conference to discuss if machines could be made intelligent" (Rossi, 2016) Artificial Intelligence defined as Intelligence which gives the capability to machines to imitate human thinking pattern on basis of data entered in it. AI can perform all the hard tasks with greater efficiency with zero error.

The tempting world of automation attracts the attention of all but it comes with a serious threat of unemployment. According to a Deloitte study, 50% of all jobs are potentially open to automation in the coming decades. Does the above statement make you skeptical about your job? Similarly, workers feel when a new machine is brought into use at the workplace. An article published in New York Times had an anecdote about a Kid who wanted to become a soldier in the future and later gets to know from his father that there are high chances that robots may replace humans in the Army profession.

So this anecdote gave me a very critical issue to ponder upon i.e. will a human invention be able to take on humans itself.

History of Jobs occupation Displacement due to Automation

- Luddites:

Humans have long feared automation since it threatens to replace them in unskilled labour with machines. Humans have always reacted negatively to new inventions in the field of automation, according to historical evidence. One such example is the Luddites, a group of people named after Ned Ludd, a weaver from Anstey, England, who was the first to break the weaving machine. The Luddites were a group of people who destroyed textile machines in Nottingham, England in the nineteenth century.. "They protested against manufacturers who used machines in what they called a fraudulent and deceitful manner to get around standard labour practices" (Connif, 2011). Luddites mostly consisted of the workshop owners who found it difficult to sell their products at the rate at which factory products were sold. Luddites called it a deceitful manner to get around standard labour practices for manufacturers using machinery as it was not possible to produce the same product at the same cost with few workers in a workshop. "Luddites feared that the time spent learning the skills of their craft would go to waste, as machines would replace their role in the industry" (History, 2015). One of the main reasons why Luddites rebelled against employing machines was because it was their lifetime to learn the weaving talent which was now readily replaced by an unqualified man utilising the manufacturing technology.

- Neo Luddism

"Neo-Luddism or new Luddism is a philosophy opposing many forms of modern technology". (E.Jones, 2006). Neo Luddism is an ideology which, due to its technology development, just has a concern of technology and a sense of work insecurity. The automation transition phase has now begun. Many employees anticipate job loss just because their task is easily automatic. Compared with the other two industrializations, agricultural one and the factory one, this shift of profession would not be smoother. The fear of the machine has come again and is the severe, never seen before. Luddism movement is being rapidly reactivated by the automation boom in 21st century. Human beings now can react to technological advances in two ways: firstly, to adapt slowly to the new technology and attempt to enhance the soft skills which cannot be automatically achieved. Governments can also play a major influence by reducing taxes on human labour and raising taxes on machines in the adoption of such technologies. Governments should also concentrate on changing education policies and focus more on vital abilities, such as language skills, critical thinking and analysis.. Training and Vocational Programmes will also be helpful for a smooth transition in other fields. The second way to react to technological progress is by implementing new technologies and seeing people's reactions against them. Suppose we were in 2030 and we knew that employees burn computers and protest against huge firms when they open news. They do this because even after having the best skills conceivable, they are replaced from work. The similar occurred in the 19th century, leading to the Luddites' mass revolution. If required efforts in reaction to technological changes are not performed, then the mass revolution can lead to loss of life and possessions.

- Invention of ATMs

The invention of the ATM (Automated Teller Machines) brought a disaster in the lives of bank tellers in the US. "In the U.S., Dallas-based engineer Donald Wetzel pioneered the development and deployment of the ATM, with the first being installed at the Chemical Bank branch in Rockville Center, New York, in September 1969." (NCR, 2021).In 1970, approximately 300,000 worked as bank tellers in the United States. They had a fear of losing their jobs but something much unexpected happened. "In the United States, tellers held approximately 608,000 jobs in 2006" (US bureau of Labour, 2008) This shocking figure brings a paradox in the situation of how the number of tellers increased in banks despite automation taking place. The answer to this question is that banks found it easy to open new branches because ATMs reduced the number of tellers required in a single bank. In this particular situation, the tellers changed their repetitive work of counting cash to more service-based like promoting sales and customer services. This brings us to the O-Ring principle.

- O-Ring Principle

In 1986, the space transport Challenger detonated and smashed down to Earth under two minutes after take-off. The reason for that crash turned out to be a modest elastic O-ring in the sponsor rocket that had frozen on the Launchpad the prior night and flopped calamitously minutes after departure. In this multibillion-dollar endeavour that straightforward elastic O-ring made the distinction between mission achievement and the catastrophic demise of seven astronauts. An astute analogy for this sad setting is the O-ring creation function named by Harvard market analyst Michael Kremer after the Challenger disaster. The O-ring creation work thinks about the work as a progression of interlocking advances. This principle of O-ring puts emphasis that every single part of the mission is equally important to make the mission successful. This situation shows the positive side of automation that improvement in a single link leads to improvement of every part in the link. If we take the example of Bank tellers from above we can observe that the invention of ATMs brought a change in the whole banking system and also transferred the work of Bank tellers from counting cash to other important activities. This shows that the improvement in a single link(ATM's) improved

the importance of other link Bank tellers in this case.

Major Threat of Artificial Intelligence is Job Loss

"Al is far more dangerous than Nukes" (Musk, 2018) .This statement shows how artificial intelligence exponentially grows and becomes dangerous for people. In direct and indirect media, AI has reached every element of our life. Robots receive enough of data and the ability to keep the data and deliver outstanding outcomes, because human beings don't possess such quality up until now. In several domains robots have already exceeded humans, with a cluster of data and superior performance efficiency.. "Success in creating effective AI could be the biggest event in the history of our civilization. Or the worst We just don't know. So we cannot know if we will be infinitely helped by AI, or ignored by it and side-lined, or conceivably

destroyed by it." (Hawking, 2017), Elon Musk and Stephen Hawking are one of those people who constantly remind us how much AI is dangerous for the human race. They seem to have been afraid of AI progress because robots do not have general intelligence so far, and if they

can flexibly think, it can lead to difficulties for people as we humans lose the upper hand over robots.

On the contrary, AI developers try to safeguard the threats posed over AI by stating that they will never develop general intelligence in Robots and humans will have sole control over robots." Worrying about evil AI killer robots today is a little bit like worrying about overpopulation over planet mars" (Ng, 2017)Andrew Ng, Computer Scientist, AI developer says that AI still faces image detection problems, one needed and one not. Thinking about evil AI robots that will destroy the earth is far away from today's time and he compares this situation of Evil AI with overpopulation over mars. "AI software will be in direct competition with a lot of people for jobs" (Ng, 2017). According to Andrew Ng, more of concern to him is the social impact of AI, the robots will be in direct competition with humans in many jobs. Therefore many of them have to change their job occupation. The emphasis is more on redesigning the education policy this will help us to face the future crisis of unemployment.

SCOPE OF THE STUDY

THE UNITED STATES OF AMERICA- SAMPLE FOR RESEARCH

The reason behind choosing the U.S.A as a sample for my research was that The US is the supreme leader in the RPA (Robotics Process Automation). Artificial Intelligence is on a boom in this country for many years which makes it a perfect sample to study automation replacing human labour.

DISCUSSION

U.S.A boosting Automation industry

Tax Structure favouring Automation Industry: The Tax structure of the USA has always been biased and in favour of automation. A heavy Tax rate above 28.5% is implied on companies using labour whereas the tax on equipment is below 15% after 2005. The tax rate has been very low from 1980 for structure, software and Equipment as compared to the tax rate on human labour. These tax rates encourage companies to bring automation into use and neglect human labour. Companies in the USA find it easy to replace human labour with machines as machines are highly productive, efficient and also get the tax benefit. The low tax rate on machines has been acting like a catalyst in transforming the labour-intensive companies into Capital intensive companies. "the effective tax rate on capital invested in equipment and software has declined to about 5 per cent today, largely as a result of favourable depreciation provisions in a series of tax laws enacted from 2002 through 2017 under the George W. Bush, Barack Obama, and Donald Trump administrations" (Daron Acemoglu, 2020). Even the depreciation provision in a series of tax laws have always encouraged companies to automate their work which was earlier done by human labour.



Figure 1: Effective tax rates on labor, software capital, equipment, and non-residential structure

Source: Brookings Institution

for definition and sources.

Note: Solid lines = observed effective taxes. Dashed lines = effective

taxes if treatment of allowances had remained as in year 2000. See text

"U.S. factories and warehouses acquired more robots last year than ever before--as automation pushes into more corners of the economy and businesses face a tight labour market." (Reuters, 2019), the shipment of robots is increasing at a high rate year after year. According to data provided by Reuters, The shipment of robots in 2018 was 28,478 which was 16% more than the year 2017. These figures exhibit the needs for robots are increasing year after year in the sectors. The booming sectors which have shipped more robots in 2018 include the Food& Consumer goods, Semi conduct& Electronics and the Life sciences sector.

Economic Studies

at BROOKINGS





Figure 2: Research and development expenditure (% of GDP) - United States

The Government of the US as always invested a significant percentage of GDP (Gross Domestic Product) in Research and Development. The percentage of R&D has increased over the years from 2.45 per cent in 1996 to 2.85 per cent in 2018. According to reports, the expenditure in Research and Development valued at \$511.1 billion in 2016. The increasing amounts of investment in R&D indicate that a country is expending more on innovation and research. The US spends a large chunk of the Research and Development budget on AI research to dominate its position in the world. "Looking at overall R&D expenditures by major AI-intensive companies gives a sense of the scale of private investments in AI R&D. The combined 2018 R&D expenditures by U.S. firms Alphabet, IBM, Facebook, Microsoft, and Amazon was \$80.5 billion." (Bipartisan Policy, 2020) Private investment has also increased in AI R&D which amounted to \$80.5 billion in 2018. This ever-increasing investment in Al Research and Development leads to the innovation of such technologies as chatbots which have the capability of reducing human labour at work. The Big players in the Private Sector like IBM, Google, Facebook, etc have already geared up the use of AI in their companies.

Companies are always looking to reduce their dependence on human labour

Source: The World Bank, 2018

for the very simple reason that they want to decrease their expenditure and increase the speed of work by employing machines at work. Thus this gives us an alarm that sooner or later humans will get replaced from the work and they have to look for new occupations.

Business Automation increasing due to COVID-19:

- Call Center Sector:

The pandemic took a toll on the Call centre sector and forced companies to empty the call centres. Employees were forced to work from remote places and work for home was adopted by many companies. Due to fewer workforces in call centres, the number of inbound calls increased because residents were keen to seek information about coronavirus and related medical information. Seeing this golden opportunity Companies like IBM and Google developed their chat-bots and AI-based voice agents which replied to the problems faced by the people in the initial phase of a pandemic. These voice-based agents were more like Alexa or Siri(Voice agents of Amazon and Apple). "While call centres have long been a frontier of workplace automation, the pandemic has accelerated the process. Organizations under pressure are more willing to try new tools. Al firms keen to take advantage and are sweetening the incentives." (Hao, 2020). The call centres were one of those sectors which were earlier in the phase of transition from human labour to automation but the covid-19 pandemic acted as a catalyst in its transformation. Chatbots developed now are fairly easy to build and are more responsive to user gueries and doubts. Al-based voice agents compared to human labour are very economic and cost-effective.

- YouTube using AI post-pandemic

YouTube AI deleted 11 million videos in the 2nd quarter from April to June in 2020. In the early phase of the pandemic due to less human moderators on work, YouTube adopted automation for reviewing and deleting offensive content on the platform. Before the corona virus outbreak, the videos which were marked offensive by the viewers were collected by machine learning

Program and afterwards it was sent to human moderators who were responsible for the assessment. But after the outbreak of the virus YouTube

completely relied on the AI and all the videos got deleted without checking human moderators. "Just 382,000 videos were flagged for removal by users, 167,000 by individual trusted flaggers, 2,220 by NGOs and 25 by government agencies. Three-quarters were removed before they got more than 10 views." (Reichert, 2020). The volume of removed videos was very high and removed videos in the 2nd quarter were double than the videos removed in the 1st quarter.

YouTube, a multibillion-dollar company, The biggest video sharing platform which will never compromise on the quality which it provides to its customers. In the wake of the pandemic, YouTube changed its video reviewing structure from human moderators to Machine learning algorithm completely. YouTube officially accepted that its algorithm for reviewing videos was in some cases inaccurate as compared to human moderators to delete the flagged video. They entirely relied on an algorithm but they had no other option left to choose from. This shows that the Machine learning algorithm which is only designed to collect the reported videos is having the potential to displace human workers from the company. Thus, Al which will be developed in future years will come with a wave of job displacement for both technical and manual jobs.

ANALYSIS

Is the US Education System Enough to Meet the Job Crisis due to Automation?

Automation has been an integral part of our lives since the age of industrialization. Every time the automation took place there has been a shift from one sector to another. The mechanization of agriculture led to the shift from agriculture to the Manufacturing Sector. Less than 1% of the US workforce working on farms is the result of mechanization in agriculture which came in the

19th century. Later automation came into the industrial sector that led to the shift of the job occupation of the workforce from the industrial sector to the Service sector. Whenever there has been advancement in automation in different sectors there has been a difficult phase of transition which leads to job losses and agitation of people. The change in occupation we will be going

through in the 21st century will depend a lot on the changes that will be adopted in the education system.

- Highly Automatable Skills, By Education

"The group, an advocacy organization dedicated to bringing together schools and businesses, argues that American schools have failed to prepare their charges for the jobs they will need to fill in the future." (Mahnken, 2017) The future belongs to automation and Artificial intelligence thus we have the only choice for us to prepare for it and adapt ourselves to automation

Figure 3: Share of Jobs with Highly Automatable Skills by Education



Share of Jobs with Highly Automatable Skills, by Education

Note: Arntz, Gregery, and Zierahn (2016) calculations based on the PIAAC 2012. Source: Executive Office of the President of the United States | Artificial Intelligence, Automation, and the Economy | December 2016

Source: Executive office of the President of the United States

The graph shows that people working in jobs that require less qualification are prone to the risk of automation. For instance, Jobs like assembling parts of automobiles that require no prior education are 44% to be automated in the coming years. Whereas, Professions like Computer Science engineering which requires a bachelor degree in the field of Computer science has a probability of 1% to be automated. Thus, having a bachelor degree in the field

of study still makes you prone to the risk of job loss in the future. One of the major problems which can be forecasted from this graph is that jobs which are performed by high school degree owners are prone to 19% automation which comprises a large chunk of the workforce of the United States. It also directly demands changes in the high school curriculum. From this study, the US can conclude that if they want to reduce the risk of job loss in the future there have to be certain changes brought in the Education system. An important reason for curriculum change is necessary because a very less fraction of students can gain a graduate degree in the US. Therefore a very small part of the above share of jobs gets assured of the risk of job loss. The changes thus brought will not only help us to reduce the risk of job loss but also open the gate of certain various new jobs that can be taught in steps curriculum in upcoming years.

The boom in automation in future will lead to an increase in jobs that require soft skills like problem-solving which robots cannot easily replicate. Very few countries are bringing changes in their education system which will help them to tackle future uncertainties caused by Automation.

- Automation Readiness Index

"The Automation Readiness Index measures countries' preparedness for the coming wave of intelligent automation The Study included the Countries which are part of G-20 and five other countries which are representing diverse parts of the world. The index provides a snapshot across a set of 25 countries of current government-led efforts to anticipate the resulting changes and shape the outcomes of technological progress". The Automation Readiness Index study is about the difference we would see in the next 20-30 years. It measures policies that promote technological progress, the creation of new businesses, the development of skills and policies that can help manage transitions in the labour market. Policies are grouped in three main categories: innovation environment, education policies and labour market policies." (The Economists, 2018)

1. Innovation Environment: The category of Innovation environment keeps a check on policies and strategies that countries use to boost research, and the environment (i.e. infrastructure) required to carry out innovation, and steps to

safely adopt the opportunities of Automation. Looking at the statistics Japan leads the individual index of Innovation environment due to whooping total budget allocation for artificial intelligence development in 2017 was approximately US\$817m.

2. Education Policy: The upcoming wave of automation requires humans to constantly update their skills and education requirements. This category measures the readiness of the countries in terms of essential changes in educational policies. The results of this index indicate that South Korea dominates the index due to changes brought in educational policies like The implementation of the Character Education Promotion Act 2015 which emphasizes building soft skill, and also Third Basic Plan for Science and Technology Talent Development which provides strategies to boost talent in the field of science and technology in the era of globalization.

3. Labour Market Policies: The automation of works in future will lead to the displacement of workers engaged in automatable work. This category measures the readiness of Countries in terms of policies that increase mobility and flexibility of workers, changes thus implemented will help the smooth transition of workers from one industry to another. This also includes the initiatives which inculcate new skills in workers. South Korea is at the top of this index as it provides subsidies to its jobless workers for vocational education and training

Overall Index: ranks and scores Average 62.1 South Korea 2 Germany 3 Singapore 873 4 Japan 82.6 5 Canada 81.8 6 Estonia 79.5 7 France 78.9 8 UK 73.1

Figure 4: Overall Index Ranks and Scores of ARI



Source: The Economist, 2018

By looking at the index we can say that developed countries or high-income countries have dominated the index. This means that these countries have formulated policies that are capable of facing challenges posed by automation in the coming future. South Korea is the leader of the index and has been number one in all the three segments of the ARI (Automation Readiness Index) i.e innovation environment, education policies and labour market policies.

- Where does the U.S stand in the Education policy category in ARI (Automation Readiness Index)?

The United States is one of the most technologically advanced countries in the world is ranked 9th on the ARI Index. One of the critical indicators in the index is education policy. Countries like South Korea have already started bringing important changes in their education policy to reduce the

uncertainties that will be caused by Automation in future. At the same time, the US remained behind when significant changes to education policy were being brought about."Very few countries are taking the bull by the horns when it comes to adapting education systems for the age of automation," (The Economists, 2018). The question which arises is how can the US take the bull by the horns? Or which key changes should be brought in the education policy to fight the upcoming pandemic that will be caused by automation.

- Emphasis on Soft skills: Soft skills like communication, critical thinking, analysis, civic thinking are the skills in which Humans have an upper hand over Machines. Even in the future, humans who will possess these skills will not be jobless as these are the key skills that are needed in every field of study. The US education system is still not providing such skills in its high school curriculum. A student needs to become a master of both hard and soft skills in the era of automation to equally stand with machines.
- 2. More Creators and Innovators: The existing education system focuses more on learning the already existing studies and finding jobs in that domain only. The future demands us to create more innovators and Creative Artists (Musicians, Painters, etc). New Innovations bring more jobs. For Instance, Zomato, The food delivery startup has given employment for both skilled and unskilled labour. A curriculum that promotes innovation and creative activities should be implemented by the US to reduce the uncertainties of jobs that will be in future.
- 3. Lifelong learning: The Government of the US should promote lifelong learning and should encourage people to update their skills to sustain in the long run. This lifelong learning can be promoted by a programme adopted by the Government of South Korea where they provide subsidies to jobless people to learn vocational training. Such initiatives can help the people of the US to keep a place in the dynamic labour market.

CONCLUSION

The time has come for countries to take strict actions against the boom of automation. The developing countries are also now witnessing the expansion

of automation and are implementing new technologies to increase productivity. There is a high focus on increasing automation in every field but very less on preparing the next generation for the unemployment crisis that will be caused by the wave of automation in the future. The paper is based on the hypothesis that the many jobs including white collar and blue collar will be automated and humans will have to search for new jobs and change their job occupation accordingly. Tracing back the history of automation, the paper gives an overview of how the transition from one occupation to another happens when new technology comes into existence. The advantage we have this time is that we have still some time left for preparation.

The critical analysis of The United States of America on the basis of ARI (Automation Readiness Index) brings the conclusion that the World Leader is itself not ready for the wave of automation that is waiting for it in the future in terms of preparing its workforce. The main loophole is in the educational policy of the country. If necessary changes like building soft skills (critical thinking, language skills, civic thinking), curriculum enhancing lifelong learning are taken into account then the risk of job loss in future can be reduced to an extent.

In addition, the effect of the Corona Virus pandemic is also brought into consideration. The pandemic has accelerated the use of automation in business and gives us a preview of the future. The transition from human labour to Machinery is not far in many industries. Therefore it's an alarm for many countries to look upon their educational policies and do the key changes to sustain their workforce in future.

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STRIDES - A STUDENTS' JOURNAL OF SHRI RAM COLLEGE OF COMMERCE ISSN 2581- 4931 (PRINT)

HISTORY OF THE JOURNAL

The idea to launch this Journal was discussed in December 2016 by the former Officiating Principal, **Dr. R. P. Rustagi** with **Dr. Santosh Kumari**, the Editor of the Journal. Since the idea appealed to **Dr. Santosh Kumari**, she took the initiative to contribute to SRCC by creating this new academic research Journal and took the responsibility for its Creation, Registration, License and ISSN (International Standard Serial Number) etc. along with *Editorship*. Therefore, **Dr. Santosh Kumari**, **Assistant Professor in the Department of Commerce, Shri Ram College of Commerce** was appointed as the Editor of the Journal vide. Office Order – SRCC/AD-158/2017 dated March 14, 2017. She meticulously worked hard in creating the concept and developing the structure of the Journal. She introduced the concept of COPE (Committee On Publication Ethics) to maintain the high academic standards of publication.

On behalf of SRCC, **Dr. Santosh Kumari** made every effort in seeking License from Deputy Commissioner of Police (Licensing), Delhi to register the Journal at "The Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India". The paper work for seeking license started under the former Officiating Principal, **Dr. R.P. Rustagi** on March 27, 2017. The foundation Issue of the Journal "**Strides – A Students' Journal of Shri Ram College of Commerce, Volume 1, Issue 1, 2016-17**" was successfully released on the 91st Annual Day of SRCC held on April 13, 2017 by **Shri Prakash Javadekar, Honb'le Union Minister of Human Resource Development, Government of India**. The title of the Journal got verified and approved by the Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India on April 21, 2017. On September 1, 2017, **Prof. Simrit Kaur** joined SRCC as Principal and signed each and every legal document required for further processing and supported **Dr. Santosh Kumari**.

On December 18, 2017, the College got the license "License No. - DCP / LIC No. F. 2 (S / 37) Press / 2017" to publish 'Strides – A Students' Journal of Shri Ram College of Commerce'. Due to change of Printing Press, the License got updated on March 09, 2018. On April 26, 2018, the SRCC Staff Council unanimously appointed **Dr. Santosh Kumari as the 'Editor of Strides**' for the next two academic years.

On April 27, 2018 (The Foundation Day of the College), **Dr. Santosh Kumari** submitted the application for the registration of the Journal. On May 04, 2018, the SRCC received the '**Certificate** of Registration' for "*Strides – A Students' Journal of Shri Ram College of Commerce*" and got the Registration No. DELENG/2018/75093 dated May 04, 2018. On behalf of Shri Ram College of Commerce, it was a moment of pride for Dr. Santosh Kumari to receive the 'Certificate of Registration' on May 04, 2018 at the Office of Registrar of Newspapers for India, Ministry of Information and Broadcasting, Government of India (website - www.rni.nic.in).

On May 07, 2018, **Dr. Santosh Kumari** submitted the application for seeking ISSN (International Standard Serial Number) at "ISSN National Centre – India, National Science Library, NISCAIR (National Institute of Science Communication and Information Resources). Weblink - http://nsl.niscair.res.in/ISSNPROCESS/issn.jsp". Finally, the College received the International Standard Serial Number "**ISSN 2581-4931 (Print)**" **on June 01, 2018.**

We are proud that this journal is an add-on to the enriched catalogue of SRCC's publications and academic literature.

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RELEASE OF FOUNDATION ISSUE OF STRIDES



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