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Impact of Recession on India's Current Economic Situation and Careers

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ABSTRACT
A recession is defined as a severe, widespread, and long-term decline in economic activity. Recessions may last only a few months, but the economy may take years to recover to levels prior to the recession. With the help of data mining this survey aims to understand the pattern of career shifts and economic fluctuations due to recession. India's exports to the United States have increased throughout time. However, India was affected and survived the devastating financial crisis of September 2008.The history repeated itself when the jobs were again affected due to the COVID 19 pandemic in the year 2020. Since then, the global work market has witnessed an increase in digitization. Because of the pandemic's increase in remote working and hybrid workforces, the professions landscape has been affected by fast automation and adoption of new technology. Cross-functionality and career merging are projected to be two of the top worldwide job trends in the coming years.
Keywords: Recession, Job opportunities, Career Shift, Indian Economy.

I. INTRODUCTION

A recession is a significant, rampant and long-term downturn in economic activity. Economists measure the length of a recession from the peak of the previous expansion to the recession trough. The recession may only last for a few months, but the economy may not recover to the peak it had many years ago.
2007-2009 Recession: The Great Recession which took place between 2007 to 2009 had affected the world economy. As expected, the 2008 financial crisis hit everything that is even remotely dependent on the US economy. The 2008 financial crisis cost the US economy about $22.8 trillion. In other words, it was about $72,000 per US citizen. [1] India at the time was less dependent on the US economy, so it was less exposed to its downsides. However, it was not completely protected from the giant bomb that reduced the entire US financial market to rubble. India's GDP fell from 9% to 7.8% in 2008. About $12 billion worth of investors pulled out of the stock market, which saw a significant drop. [1]
2023 Recession: A recession-causing economic shock is the 2020 COVID-19 pandemic and the public health measures put in place to stop it. Despite only lasting for two months, the COVID-19 pandemic-related economic slowdown in 2020 was so severe and broad that the NBER classified it as a recession. This survey uses data mining to analyse the pattern of career changes and economic volatility brought on by the recession.,[12] The study projects that India's economy will grow to $10 trillion by 2035 and move up to third place globally

by 2032. Being one of the world's great nations, the United States will be affected by any recession, no matter how mild. In the end, the crisis deepened and became a global economic.[3] After the 2009 recession there were still many job opportunities still out there. Like in the industry of computer and engineering where in the upcoming ten years, it is expected that employment in the computer industry would increase by more than 20%, and 2009 will be no exception.

Even though there are many jobs lost but at the same time there are many job recruitments too like in the field of Data Detective where the Data detectives assist in bridging the gap and persuading businesses to investigate the mysteries in big data. The Human- Machine Teaming Managers; using human-machine teams at the nexus of humans and machines, managers will foster smooth cooperation. Openings for pioneering positions like robotics technologists have already increased by 50%.

II. LITERATURE SURVEY

With the wide spread of Recession throughout the globe it has affected the employment and economic status. In contrast to the most recent IMF estimate, the researcher's findings are more dismal. This agency issued a warning in October, according to Bloomberg, predicting that more than a third of the world's economies will fail and that there is a 25% chance that in 2023, the global GDP will grow by less than 2%, which it refers to as a global recession. As emerging economies catch up to the wealthy ones by 2037, the global gross domestic product will have doubled. By 2037, the East Asia and Pacific area will contribute more than a third of global output, while Europe's contribution will fall to less than a fifth due to shifting power dynamics, according to Bloomberg.

[4] According to the most recent available data from the World Bank, the Indian economy expanded by 8.7% even after the covid-19 outbreak and the Russia-Ukraine crisis in 2021. A 6.5% increase is anticipated for the upcoming fiscal year (2022- 2023). [5]

The 2007-2009 recession also known as The Great Recession was an economic downturn that began in the United States as a result of the financial crisis of 2007–2008 and extended fast to other nations. It was the longest and most severe economic slump to hit several nations, including the United States, since the Great Depression (1929–1939), which started in late 2007 and lasted until mid–2009.

While most of the world's developed economies, particularly in North America, South America, and Europe, went through a severe, prolonged recession, many more recently developed economies, particularly China, India, and Indonesia, whose economies grew significantly during this time, felt the effects of the recession far less severely. So, when recession hit the world in 2009 the Indian economy, which was heavily dependent on agriculture, avoided facing widespread unemployment like other affected countries. Even though India's exports of goods were significantly harmed by the Great Recession, exports of IT and BPO were unaffected. The amount of foreign direct investment rose despite the financial crisis. While investors stopped pouring money into India, long-term owners of businesses and factories kept working on their current initiatives.

We can observe a pattern that recession period lasts for not more than 18 months. So, from November 1973 to March 1975, a 16-month recession in the middle of the 1970s occurred. Two recessions occurred in the early 1980s, the first lasting six months (January 1980 to July 1980) and the second spanning 16 months (July 1981 to November 1982). From December 2007 to June 2009, the Great Recession of 2008 lasted a total of 18 months. Finally, from February 2020 to April 2020, the pandemic slump lasted just two months. [12] Recessions

typically last for a short period, but because it takes the economy some time to recover from them, it might feel like they last for years. [7]

In response to concerns about the global economic downturn, Finance Minister Nirmala Sitharaman urged Indian industry to devise strategies for how corporations based in developed countries can consider India as a production or sourcing hub.

According to the minister, India has made a number of reforms to its rules and regulations to make it easier for foreign firms to invest there. It is also interacting with firms interested in locating there. Several modifications have been made to India's laws and regulations to make it easier for multinational corporations to invest there. It is also interacting with firms interested in locating there. She further stated that as much as you are planning for a long-term recession in the Western world, in the Developed

FACTORS INFLUENCING THE OCCUPATIONAL SHIFT DUE TO RECESSION

Many industry observers believe we are on the verge of the Fourth Industrial Revolution. Artificial intelligence and machine learning, robotics, nanotechnology, 3D printing, genetics and biotechnology are all building on and amplifying one another. Smart systems—homes, industries, farms, grids, or entire cities—will aid in the resolution of issues ranging from supply chain management to climate change. Concurrent with this technology revolution are a number of broader socioeconomic, geopolitical, and demographic shifts, all of which interact and amplify one another. According to studies, a shift in the human-to-machine labor ratio might result in the loss of up to 85 million jobs by 2025. In this uncertain time, jobs that help businesses achieve more with less are on the rise.

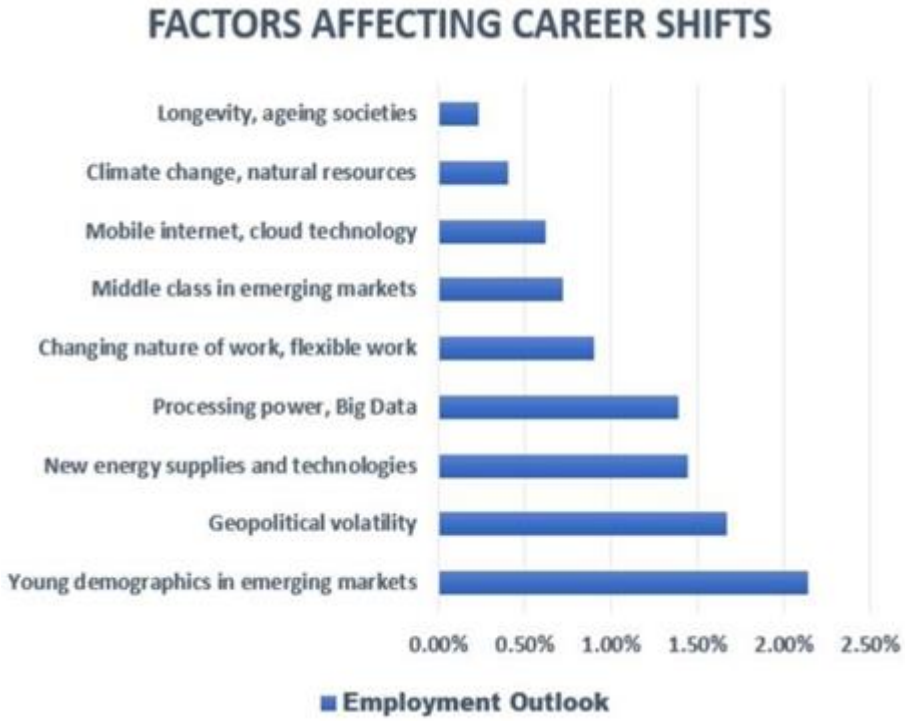

Fig 1. Factors affecting career shifts

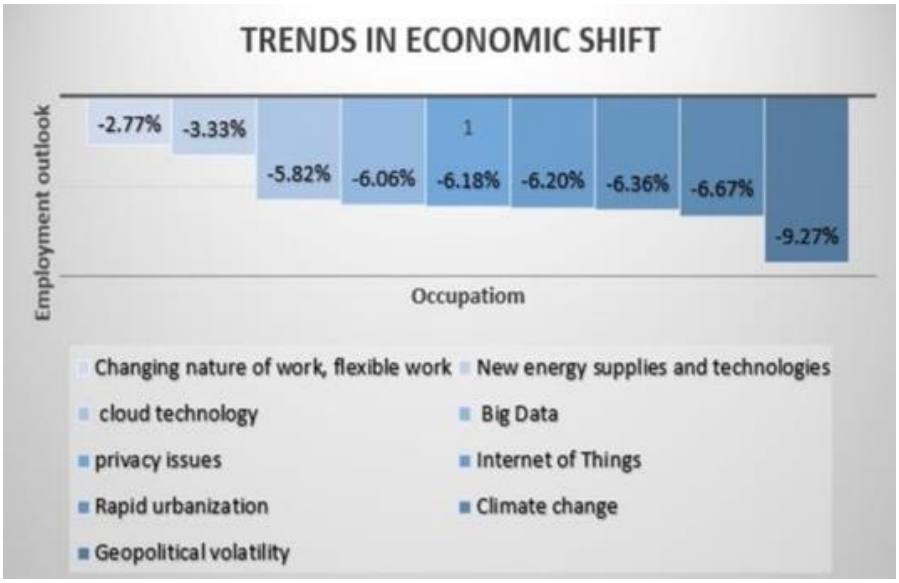

Fig 2. Trends in economic shift

World, I believe this is also the perfect time for you to devise tactics for attracting manufacturers from there to India. [7]

While these upcoming developments hold immense promise for future prosperity and job growth, many of them also pose significant problems that will necessitate deliberate adaptation on the part of firms, governments, societies, and individuals. As these impending changes hold immense promise for future prosperity and job growth, many of them also pose significant problems that will necessitate deliberate adaptation on the part of firms, governments, societies, and individuals. Many vocations will experience fundamental change as entire industries adapt and new ones emerge.

Together, technical, socioeconomic, geopolitical, and demographic developments, as well as their interplay, will create new job and vocation categories while partially or entirely eliminating others. They will alter the skill sets required in both old and new vocations across most industries, as well as affect how and where people work, posing new managerial and regulatory issues.[2]

III. METHODS AND MATERIAL

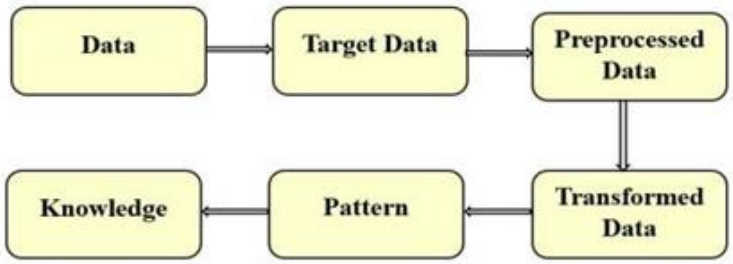

Fig 3. Steps for Data Mining

A. Data Collection:

Tweets containing the keywords "career" and "recession" from Indian users between December 22 and January 2023 were harvested using the Python module Twint. Because the data from social media is unstructured, we must pre-process it. We used 8,54,312 English tweets sent by Indians for this study after eliminating duplicates and tweets in other languages.

B. Data Cleaning:

Data cleaning is essential for obtaining the appropriate results from text analytics study. We cleaned the data before beginning our investigation, which meant eliminating all items that were not required for textual data analysis. Stop words, punctuation, URLs, and other non-essential text analytics elements were eliminated. Stop words are letters with no inherent meaning and hence are useless for analysis, such as "a," "an," and "the." We also lemmatized and stemmed the data in our corpus. The act of organising a word's inflected forms according to the term's lemma is known as lemmatization. This technique eliminates word inflectional ends by restoring the word to its dictionary form using vocabulary analysis. The same goal is being attempted by stemming, but through a different means.

C. Data Analysis:

By far the most important predicted drivers of job creation are demographic and socioeconomic in nature, specifically the opportunities given by young demography and rising middle classes in developing economies, as well as women's rising economic power and aspirations. In contrast, our respondents are unanimous in their belief that rising geopolitical uncertainty is the greatest danger to global employment and job creation. Further unpacking the bundle of technological change drivers in the mould of the Fourth Industrial Revolution, on the other hand, yields a rather more optimistic picture of the job creation potential of technologies such as Big Data analytics, mobile internet, the Internet of Things, and robotics. This aggregate-level perspective of the variables driving employment transformation, however, conceals enormous variety and essential nuances at the level of particular work families and occupations. Our survey respondents anticipate high job growth in the Architecture and Engineering and Computer and Mathematical job groups, a moderate reduction in Manufacturing and Production positions, and a significant decline in Office and Administrative roles. Other significant job families, such as Business and Financial Operations, Sales and Related, and Construction and Extraction, have a broadly flat worldwide employment prognosis from 2015 to 2020.

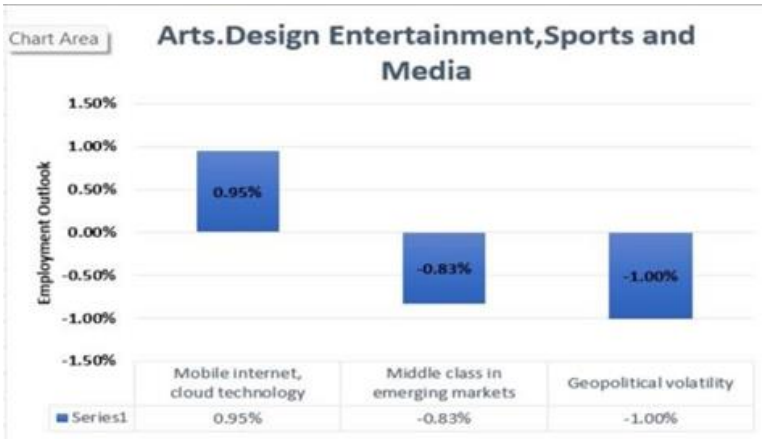

Fig 4. Impact on art, Design, Entertainment, Sports and media

IV. RESULT AND DISCUSSION

Business model disruption will have a significant impact on the job landscape in the coming years. Many of the major transformational drivers that are currently shaping global sectors are projected to have a big influence on jobs, ranging from significant job creation to job displacement, and from increased labour productivity to increasing skill gaps. The most in-demand jobs or specialties did not exist 10 or even 5 years ago in many industries and nations, and the rate of change is expected to accelerate.

While these impending changes hold immense promise for future prosperity and job growth, many of them also pose significant problems that will necessitate deliberate adaptation on the part of firms, governments, societies, and individuals. Many vocations will experience fundamental change as entire industries adapt and new ones emerge. Together, technical, socioeconomic, geopolitical, and demographic developments, as well as their interplay, will create new job and vocation categories while partially or entirely eliminating others. They will alter the skill sets required in both old and new vocations across most industries, as well as affect how and where people work, posing new managerial and regulatory issues. Because of the quick pace of change, business model disruptions have a near- simultaneous impact on employment and the need for new skill sets, necessitating an urgent and concerted effort to react. By far the most important predicted drivers of job creation are demographic and socioeconomic in nature, specifically the opportunities given by young demography and rising middle classes in developing economies, as well as women's rising economic power and aspirations. In contrast, our respondents are unanimous in their belief that rising geopolitical uncertainty is the greatest danger to global employment and job creation.

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V. CONCLUSION

Cross-functionality and career consolidation are two of the top expected global work trends for the foreseeable future. According to research, a shift in the ratio of human to machine labour might lead to the demise of up to 85 million employments by 2025. Jobs that help organisations use less resources more effectively are becoming increasingly in demand in this uncertain period. These components will continue to grow and promote effectiveness and efficiency as firms strive to better facilitate their deals, showcasing, and customer triumph operations with the only goal of producing income growth. The expansion of advanced change and specialised discoveries are expected to result in the creation of 97 million contemporary businesses simultaneously. According to estimates, 40% of crucial abilities will need to be improved. [9] This highlight how very important it is to upskill and reskill in every function, department, and organisation. The evidence suggests that

some emerging employment clusters offer significant chances for career pivots into growing jobs (jobs in increasing demand). As illustrated 50% of the shifts made into Data and AI professions are from non-emerging occupations. This figure is substantially higher in sales (75%), content (72%), and engineering (67%). One could argue that such fields are easier to enter, but others, such as Data and AI and People and Culture, present greater hurdles. These results indicate that some level of labour force reallocation is already taking place. Both current and future workforces must be ready for continuous skill improvement if they are to stay relevant.

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