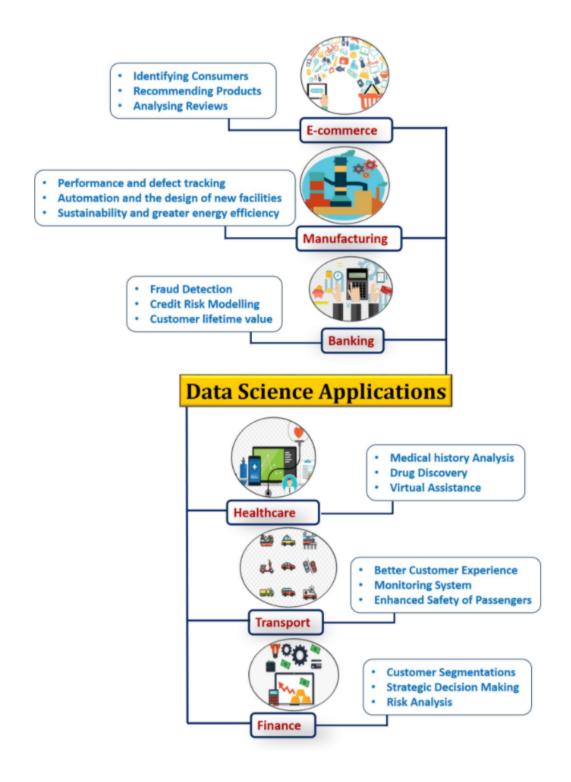
# WHAT IS SCOPE OF DATA SCIENCE IN INDIA

Data Science can be defined as a multi-disciplinary tool that extracts insights from structured and unstructured data using scientific methods, processes, algorithms, and systems. In technical language, Data Science unifies statistics, data analysis, and machine learning to understand and analyse actual phenomena through data.

Data Science cannot be considered a completely technical tool as it employs techniques and theories from fields such as mathematics and statistics along with computer science and information science. The main 3 components involved in data science are organising, packaging and delivering data. Data Science analyses data and the results of that analysis are used to draw conclusions and make decisions on it.

**APPLICATIONS OF DATA SCIENCE:** 



#### THE CAREER OF DATA SCIENCE IN INDIA:

In India, most of the start-up companies have shifted their traditional software development work to data science. They know that data science can make their development work so easy. With this, they can easily analyze their data workflow and can manage their work according to that. In India, there is a huge scope of data science. People are

moving to this technology and making their careers in data science. A data scientist has a deep learning curve. This technology includes various disciplines like mathematics, statistics, and computer science. You should have analytical thinking to become a data scientist. A full-fledged data scientists are those who proficient in these fields. Due to the very high learning curve there are very few data scientists available in India. The industry needs those candidates who are proficient in these skills and can fulfill their requirements. India is the second country after the United States of America where there are many universities available that provide degree in data science. As a result, there are very few candidates who process this degree. So there is a lack of data science roles. As I already told that various start-ups have emerged with the data science technology. Due to lack of this role, these companies are finding difficulties to get the right candidate for their business. Data science jobs have increased to 45% compared to last year. This figure will give you an idea that how much data science role increased in India.

#### **DATA SCIENTISTS: SALARIES**

As organisations are turning towards Machine Learning, Big Data, and Artificial Intelligence, the demand for data science roles is seeing a sustained and accelerating upward surge. Since 2012, the Data Science sector has witnessed a massive hike of 650%, far outpacing other sectors.

Therefore, transitioning to data science is a smart move as it fetches far higher comparative returns. For instance, transitioning from a marketing analytics job to a data science job leads to a 37% salary growth on average.

Similarly, the expected salary growth when people switch from digital analytics to data science is 31% on average. For someone transitioning from a data engineering role to a data science role, the salary hike could be as high as 44%.

According to recruitment firm Michael Page's 2021 India Talent Trends report, data science professionals with 3-10 years of experience get annual salaries in the 25-65 lakh range, while those with more experience can command pay packages upwards of 1 crore.

Professionals with over 15 years of experience can get paid up to 1.8 crores. Similarly, the average annual pay hike for data science professionals falls between 20-30% compared with 15-20% for professionals from other backgrounds.

### **REDEFINING TRADITIONAL ROLES:**

With the advancement of automation and artificial intelligence, the roles are reducing. The roles like IT administrator, testing, database managers have found several years but due to artificial intelligence, these roles are decreasing day by day. Moreover, Indians IT workers are getting affected due to their skills gaps stated by the IBM chief Ginni Rometty. These job losses in the computer industry are known as "digital bloodbath" and have hit the Indian IT workforce immensely. This is a challenging issue that requires special attention from employees to improve their skills and keep pace with the needs and requirements of the IT industry. To do this, employees need to be familiar with the technology of the future – data. There is a huge field of activity for data in India – not only for data science but also for data analysis, big data engineers, big data managers, and data architects. If only the demand for data scientists is very great, imagine the demand for all of these roles together! The need for data scientists and other data-related professions is greater than ever. Therefore, data science in India can be seen as a new direction for people to build their careers for long-term benefits. It is clear that data science is very extensive in India.

## **CONCLUSION**;

In this article, we overviewed how India is experiencing massive growth in data science positions. We also understood various factors that are leading to the surge in need for data scientists. We also discussed as to why the position of data science is attracting large salary bonuses.

Furthermore, we discussed the "Digital Bloodbath" that has transformed our IT industry and how a career in data science can promise a stable future.