USE OF ARTIFICIAL INTELLIGENCE IN AYUSHMAN BHARAT (NHPS)

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Abstract - *In current time there is trend of automatic machines. In the future many areas of human capabilities will be replace by the intelligent machines. Artificial Intelligence (AI) is intelligence exhibited by machines or software's. It is a popular field in computer science. In the past one two decades Artificial Intelligence has improved the manufacturing and service systems performance in a good manner. Currently Artificial Intelligence are used in various field of engineering, weather forecasting, business, medicine, various field of science to solve complex problems. This research paper gives an overview of this technology. This paper will also give the current use of Artificial Intelligence in helping government for survey, distributing people based on the annual income, Detecting diseases.*

Key Words: **Artificial Intelligence, Decision making, Data Analysis etc.**

1. INTRODUCTION

1.1 Artificial Intelligence

In current time Artificial Intelligence is playing a great role in the Operational research as well as Management science research areas. Intelligence is the ability to reason plan, solve problems, think abstractly, complex ideas, learn quickly and learn from experiences. In future machines using intelligence will took over human capabilities in many areas. Artificial Intelligence is the branch of Computer Science concerned with making computer behave like humans. The term Artificial Intelligence was coined in 1956 by John McCarthy at the Massachusetts Institute of Technology. It is the study of computational that makes it possible to perceive reason and act. Artificial Intelligence makes machines more useful and smarter. It's different from psychology, it have special importance in computer science field because of its impact perception, reasoning and action. Artificial Intelligence works with the help of artificial neural networks and lots of scientific theories (which include If else conditions and Logics). Major Artificial Intelligence areas are Expert Systems, Robotics, Natural Language Processing, Games, Computer Science, and Aviation. These growing technologies have a huge impact on various fields of life. The various techniques applied in Artificial Intelligence are Fuzzy Logic, Neural Network, Evolutionary computing and Hybrid Artificial Intelligence.

Artificial Intelligence is more permanent, consistent, less expensive compare to Natural Intelligence. Artificial Intelligence performs tasks much faster and better than the human. The Turing test Approach: The Turing test was proposed by Alan Turing in 1950. This test was designed to test that whether machine can think or not. The test involves a human interrogator who interacts with a human and with a machine. Interrogator has to identify who is human and which one is computer. The computer can pass the test if an interrogator gives some written questions fail to verify whether the written response is coming from human or from the machine.

1.2 Ayushman Bharat (NHPS)

Ayushman Bharat is National Health Protection Scheme, which will cover over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries) providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization. Ayushman Bharat – National Health Protection Mission will subsume the on-going centrally sponsored schemes – Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS)

2. Salient Features of Ayushman Bharat (NHPS)

- Ayushman Bharat - National Health Protection Mission will have a defined benefit cover of Rs. 5 lakh per family per year.
- Benefits of the scheme are portable across the country and a beneficiary covered under the scheme will be allowed to take cashless benefits from any public/private empaneled hospitals across the country.

- Ayushman Bharat - National Health Protection Mission will be an entitlement based scheme with entitlement decided on the basis of deprivation criteria in the SECC database.
- The beneficiaries can avail benefits in both public and empanelled private facilities.
- To control costs, the payments for treatment will be done on package rate (to be defined by the Government in advance) basis.
- One of the core principles of Ayushman Bharat - National Health Protection Mission is to co-operative federalism and flexibility to states.
- For giving policy directions and fostering coordination between Centre and States, it is proposed to set up Ayushman Bharat National Health Protection Mission Council (AB NHPMC) at apex level Chaired by Union Health and Family Welfare Minister.
- States would need to have State Health Agency (SHA) to implement the scheme.
- To ensure that the funds reach SHA on time, the transfer of funds from Central Government through Ayushman Bharat - National Health Protection Mission to State Health Agencies may be done through an escrow account directly.
- In partnership with NITI Aayog, a robust, modular, scalable and interoperable IT platform will be made operational which will entail a paperless, cashless transaction.

3. PROBLEM DEFINITION

3.1 Survey

- For this particular NHPS government has come up with some criteria that would be carried by annual income which will include all family members. The family annual income has to fall under pre-defined criteria.
- The government is gathering data from SECC (Socio-Economic Caste Census) database.
- The first problem arises is the chances of missing data from database is high and to analyse each and every persons data is a time consuming process.
- The second problem is by using of SECC database it is not guaranteed that each and every poor family are been benefited with this scheme because it is highly possible houses been left while survey manually.

3.2 Availabilities of facilities in different locations

- The first is the massive shortages in the supply of services (human resources, hospitals and diagnostic centres in the private/public sector), made worse by grossly inequitable availability between and within States.
- For example, even a well-placed State such as Tamil Nadu has an over 30% shortage of hospital and non-hospital professionals in government facilities.

4. PROBLEM SOLVING

4.1 Our Solution to solve issue of survey

- As government is using SECC database to track the family financial condition and it is very time consuming to analyse each and every record using human resource.
- So, if we are using Artificial Intelligence to analyse the data it will help to gather the data that falls under the particular criteria in certain period of time which will be far more less than what would be time taken by human power.
- The next solution towards the survey is as we don't know the SECC database has each and every family records so we can link the SECC database with Aadhar card or Ration card database using Artificial Intelligence.
- So Artificial Intelligence can compare the Ration card or Aadhar card database with SECC database to find the best result for government.
- If some family data is available in Aadhar card or Ration card and doesn't showed up in SECC database, So Artificial Intelligence can alert the government agencies to take further action for the missing data.

4.2 Solution to help the government to provide best facilities in different locations

- As mentioned earlier about the issue of Tamil Nadu state, we have come up with a solution from that central government will be able to know about the facilities providing in different locations and will be able to enhance the facilities.

- So, our solution towards the central government is to create a website and to circulate the website links to all the states.

- The website will include details about the hospital facilities available in the states, so state government have to circulate the website link to every hospital and ask to complete the details.

- The data which has been filled by all states hospital will be collected by central government which will be in a huge amount.

- So, we can use the Artificial Intelligence to analyse the data and the process will be faster and will take less amount of time.

- Artificial Intelligence will then able to differentiate the facilities are provided and the facilities which are missing in different hospitals and will able to create a perfect overview for the government to provide better facilities and it will be a faster method to help out the areas that are in more need.

- As we have created a demo page how a survey carried by a website.

Demo Website Page

5. CONCLUSION

- The field of artificial intelligence gives the ability to the machines to think analytically, using concepts. Tremendous contribution to the various areas has been made by the Artificial Intelligence techniques from the last 2 decades. Artificial Intelligence will continue to play an increasingly important role in the various fields.

- This paper is based on the concept of Artificial Intelligence how it can be used in Ayushman Bharat (NHPS) to provide the best result in different areas and to save the time and human power which will generally help to reduce the cost.

- We conclude that further research in this area can be done as there are very promising and profitable results that are obtainable from such techniques. This technology and its applications will likely have far-reaching effects on human life in the years to come.

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