**Assignment no.1**

Aim:

To develop the problem under consideration and justify feasibility using concepts of knowledge canvas and IDEA Matrix.

Problem Statement:

To create a real-time machine learning model to predict the risks in disease occurrence and growth of diseases affected by climate and to plan the daily routine accordingly based on the weather forecast.

Problem Description:

We intend to analyze the data available for various patients of certain diseases which are primarily affected by change in daily routine , climate and diet . From this analysis we recognize certain pattern related to symptoms , cause and treatment of the disease . Based on this analysis we create a model to predict the risks , prevention and precautions to be taken by the patients with similar pattern . Also the prediction will be supported by the climate forecast and current changes in medical health of the patient . Based on the analyzed and detected patterns , the current medical health and climate changes to be confronted by the patient we aim to give in advance prediction to the patient . We also intend to provide the precautionary methods . Along with prediction we intend to prompt the patient about taking care of his health based on his personal health status and the climate changes .

Knowledge Canvas and IDEA Matrix:

Knowledge Canvas is one that depicts the knowledge forces and knowledge flow across the organization and extended organizations’. It captures the current knowledge state and knowledge forces in the environment. It tries to build bigger knowledge scenario for projects. It helps to identify the knowledge opportunities, prospective knowledge partners and knowledge losses. It is used to establish association among knowledge opportunities.

Principle components for knowledge canvas include:

* Knowledge force for cost saving
* Knowledge about precision
* Knowledge about social reluctance
* Automation economics
* Precision economics
* External knowledge forces
* Globalization knowledge force

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| **I** | **D** | **E** | **A** |
| **Increase efficiency** to plan the daily routine to decrease the risk of disease. | **Drive**  daily planning based on changing weather and the risks. | **Evaluate**  Risks of disease occurrence. | **Accelerate**  Health status and productivity of persons. |
| **Improve users**  use of machine learning and forecasting. | **Deliver**  Proper daily plan and precautions so as to prevent occurrence of diseases. | **Enhance**  Daily life to reduce risk. | **Associate**  Doctors decision and data of new users of learning. |
| **Ignore**  diseases not affected by climate and daily routine | **Decrease**  risk of disease occurrence and growth. | **Eliminate**  accuracy of weather forecast and exceptional symptoms. | **Avoid**  other symptoms. |