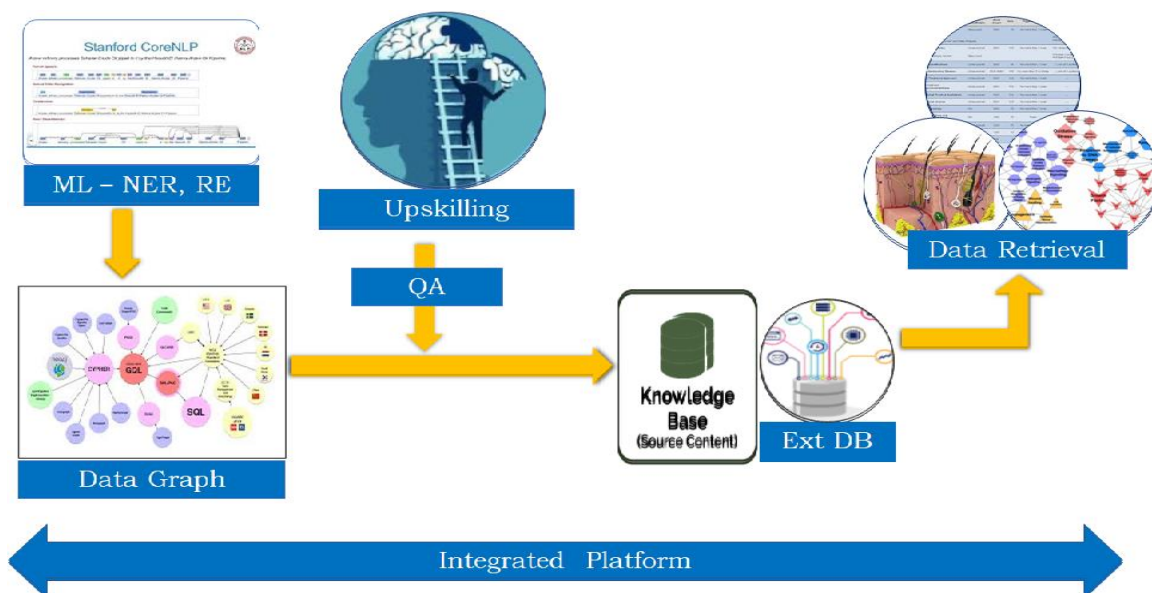


Manav: A Human Atlas Initiative

New Delhi, Dec 28: The Department of Biotechnology in the Union Ministry of Science and Technology has implemented a project named 'MANAV: Human Atlas Initiative' to construct a comprehensive and integrated human map by assimilating all the known macro-level and micro-level information from scientific literature and public databases.



The project has utilized an open source hybrid annotation application (Hypothesis; open source application) and developed over it to add various modules to enable the Manav manual annotation methodology for facilitating bio-curation and integrating various algorithms for categorization of the corpus of scientific articles into subject and complexity categories.

The Manual Annotation tool along with the categorization algorithms have undergone a beta testing wherein performance of this algorithm was found ~80-85% accurate at various validation methods. The Quality Assurance & Review Systems have been designed to ensure that scientific data of high quality is curated and provided to the user. The team has also developed an end-to-end pipeline for auto annotation and relation building which leads to a query able knowledgebase.

Project Manav not only disseminates scientific information but also evokes the interest of India's youth in scientific research and scientific thinking through modern methods of social media engagement. It has an extensive social media presence across multiple social platforms (Facebook, Twitter, Instagram, LinkedIn, YouTube) with more than 1004 Twitter followers, 618 Facebook followers, 733 Instagram followers, 170 LinkedIn followers (73 connections),

and 489 YouTube subscribers. Additionally, the channels of mass media like television and scientific research magazines were also used.¹ The reach outreach through these media's is being done in various languages including Hindi, Urdu, Malayalam, Tamil, Kannada, Assamese, Bengali.

Noticeably, during the COVID pandemic the project has constructively engaged college students in science through an extensive Data Science webinar series. It has brought eminent national and international scientists and entrepreneurs closer to students to motivate them and inculcate a global scientific culture. These webinars reached out to 6181 students, postdoctoral and scientists across 26 states and 7 Union territories.

Societal Impact of the project:

1. Building a Science Community in India: through the various engagements that the project has with students, researchers and knowledge experts, it promises to provide a platform of interaction, connection and joint contribution thereby building a science community in the country.
2. Upskilling of thousands of Science Students: Manav brings to our science students advanced knowledge structuring mechanisms and trains them aligned to global standards at the early learning stages. Yet again India will produce a well informed science workforce to lead science ventures for tomorrow.
3. Enabling research through easily comprehensible scientific information: The platform will develop a structured database from thousands of scientific articles and represent information in a manner that facilitates identification of research gaps and promotion of analysis of large information thereby supporting researchers across the world.
4. Source of Scientific information: The platform will provide a source of referenced scientific information to all its users extending from an expert (researcher or clinician) to a lay person who intends learning and knowing. In the world with an explosion of information on the internet that may or may not be based on scientific facts, this provides an authentic knowledge source.

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Link: <http://dbtindia.gov.in/manav-human-atlas-initiative>