



2. TDIL Vision

TDIL Vision 2010

TDIL: Technology Development for Indian Languages.

Vision statement

Digital unite and knowledge for all.

Mission statement

Communicating & moving up the knowledge chain overcoming language barrier.

Objectives

- ▶ To develop information processing tools to facilitate human machine interaction in Indian languages and to create and access multilingual knowledge resources/content.
- ▶ To promote the use of information processing tools for language studies and research.
- ▶ To consolidate technologies thus developed for Indian languages and integrate these to develop innovative user products and services.

Major Initiatives

- ▶ *Knowledge Resources*
(Parallel Corpora, Multilingual Libraries/ Dictionaries, Wordnets, Ontologies)
- ▶ *Knowledge Tools*
(Portals, Language Processing Tools, Translation Memory Tools)
- ▶ *Translation Support Systems*
(Machine Translation, Multilingual Information Access, Cross Lingual Information Retrieval)
- ▶ *Human Machine Interface System*
(Optical Character Recognition Systems, Voice Recognition Systems, Text-to-Speech System)
- ▶ *Localization*
(Adapting IT Tools and solutions in Indian Languages)
- ▶ *Language Technology Human Resource Development*
(Manpower Development in Natural Language Processing)
- ▶ *Standardization*
(ISCI, Unicode, XML, TMX, ISFOC etc.)

TDIL Programme Goals

Short Term Goals

- ▶ Standardization of code, font, keyboard etc.
- ▶ Fonts and basic software utilities in public domain.
- ▶ Corpora creation and analysis
- ▶ Smart content creation.
- ▶ Language Technology be integrated into IT curricula.
- ▶ Collaborative development of Indian language lexical resources.
- ▶ Writing aids (Spell checks, grammar checks and text summarization utilities).
- ▶ Sharing of standardized lexware & development of lexware tools.
- ▶ Training programs on ILT awareness, lexware development, and computational linguistics.

Medium Term Goals

- ▶ Indian language speech database
- ▶ Multilingual, multimedia, content development with semantic indexing, classical and multi font and decorative fonts, offline/online hi-quality OCR.
- ▶ Cross lingual information retrieval (CLIR) tools.
- ▶ Human speech encoding
- ▶ Speech Engine : Speech recognition, specific speech I/O.
- ▶ Indian language support on Internet appliances.
- ▶ Understanding and Acquisition of languages, knowledge representation, gisting and interfacing.
- ▶ Distinguished achievement awards for M.Tech/ MCA/Ph.D. level in Indian Language Technologies.
- ▶ Machine aided translation: English to Indian languages, among Indian languages, Indian languages to English and other foreign languages.
- ▶ On line rapid translation, gisting and summarization.

Long Term Goals

- ▶ Speech-to-speech translation.
- ▶ Human Inspiring Systems.