**FEASIBILITY STUDY**

Feasibility study is made to see if the project on completion will serve the purpose of the organization for the amount of work, effort and the time that spend on it. Feasibility study lets the developer foresee the future of the project and the usefulness. A feasibility study of a system proposal is according to its workability, which is the impact on the organization, ability to meet their user needs and effective use of resources. Thus when a new application is proposed it normally goes through a feasibility study before it is approved for development.

The document provides the feasibility of the project that is being designed and lists various areas that were considered very carefully during the feasibility study of this project.

Chapter

Technical Details

We have used a hybrid approach i.e a combination of the RBMT (Rule based Machine Translation) and EBMT(Example Based Machine Translation) .This hybrid approach in its purest sense makes use of source and target parallel sentences alongwith the benefits of Rule Based Machine Translation.

For translation generally rule based, Statistical based and Example Based approaches are used and Rule Based methods for machine translation is divided in to another three types

1.Transfer based machine translation: - Type of machine translation based on idea of interlingua and is currently one of the most widely used area.It is necessary to have an intermediaterepresentation that captures the “meaning” of the original sentence in order to generate the correct

translation.

2. Dictionary based machine translation: -Machine translation can use dictionary based approach , which means that the words will be

translated as they are by a dictionary.

3. Interlingual based machine translation:Machine translation can use dictionary based approach mean the text to be translated, is transformed into an interlingual, i.e. source or target language-independent representation. The target text is then generated out of the interlingua.

The Example Based Machine Translation(EBMT) approach is often characterized by its use of a bilingual corpus as its main knowledge base, at run-time. It is essentially a translation by analogy and can be viewed as an implementation of case-based reasoning approach of machine learning.

The advantage of this approach is that it can be language independent

and makes minimal use of linguistic resources as they are sparse in our case.

We aim to build rapid English to Sanskrit language Hybrid Transliteration systems making the most of the available minimal

resources - parallel texts and bi lingual dictionaries.

Design is a process through which requirements are translated into a representation of software.The design of Hybrid approach of Machine Transliteration can be shown as :-

Rule Based Pattern

Sanskrit Text Generator

Example Based MT approach

Pattern Directing Parsing

Lexical Analysis

Morphological Analysis