

# A Tamil Knowledge Engine

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This paper is an attempt to introduce the concept of an all comprehensive structure to meet the needs and requirements of the users, mostly of rural areas in their pursuit of their knowledge. Hence, it is named the **Tamil knowledge Engine**.

## 1. Introduction

There is no doubt that the Internet had dramatically altered the manner in which knowledge is disseminated. But the question is how best to make use of the internet-based dissemination of knowledge reach the semi-urban and semi-rural public of Tamil Nadu who are partially educated and marginally literate. We should seriously think about this.

## 2. The Scheme of a Tamil Knowledge Engine

This paper attempts to provide a scheme keeping in mind the above matter from the point of view of an Educationist. We will use this as an illustrative example to bring to the attention of the members of the IT community, the particular kinds of enabling technologies whose creation will prove to be vital in such endeavors.

The scheme, we propose, is for the construction of a portal (which we refer to as **Tamil knowledge Engine**) which will give boost to the creation of Tamil and bilingual (Tamil and English) Data Base together with a Tamil Search Engine.

## 3. Why a Tamil Knowledge Engine?

The Tamil knowledge Engine is visualized as a part of a wider technological, educational, sociological and indeed cultural and attitudinal change. Such a transformation is no less momentous than the dramatic changes in European society during the sixteenth and seventeenth centuries following the Gothenburg revolution of the Printing Press.

We visualize the Tamil Knowledge Engine not as an arbiter of knowledge and ideas, but as a springboard for the personal and intellectual advancement of the less privileged people who have not received the benefit of better-funded education and experiences.

The Tamil knowledge Engine would serve to open up worlds previously unknown to the user in semi-rural Tamil Nadu. It would also serve as a gateway of accessing the increasing wealth of information relevant to day-to-day life.

In this context, it may be noted that the Japanese Language has successfully penetrated into every aspects of technology development as well as in application software.

## 4. The Architecture of the Tamil Knowledge

- This Tamil knowledge Engine is for the masses.
- An expandable Data Base, which will accept queries not only in English but also in Tamil.

Whenever a query is given in English or Tamil, the result should be available both in English and Tamil.

- This kind of Data Base should accommodate unlimited increase of entries.

By this we mean that it should be able to take into its system any information available in future. This will keep it updated at any given time.

The example of Wikipedia project (<http://en.Wikipedia.org>) furnishes a good starting point. The Wikipedia is ready with the development as they go on including; the recent declaration of Tamil as a classical Language is also available in the site.

- The Data Base architecture and resources should support the archiving of articles.

Good example is: freely accessible and first rate journals such as those published by Public Library of Science (<http://www.plos.org>)

In this case there are journals on libraries and library science available in English in India. If and when they are ready for consumption in Tamil, the Tamil knowledge Engine should make use of it.

What we need for the Tamil knowledge Engine is more correct, more complete and more comprehensive than what is available in Google.

- The digitization of various dictionaries and encyclopedia has gone apace during the last ten years. Indeed, at the Tamil Virtual University we have made available online the pioneering bilingual dictionary of Dr.Chidambaranatha Chettiar (University of Madras). In this, what is available in the print is now available in the web site. Nothing more, nothing less. The Tamil knowledge Engine will, not only present what is available, but also provide further and later information in the matter concerned. The Tamil knowledge Engine, instead of giving only the information on which sites they are found, it should also try to gather related information from every kit and present in a consolidated way.

The Tamil knowledge Engine plays another role with regard to Tamil. That is, if the English meaning of a Tamil word is asked, it should raise a question about the field in which that particular Tamil word is used. The Engine must have the capacity to supply the right answer when the subject is mentioned. This will make it perfect.

An illustration will explain this;

kAl (Zoology / Anatomy) - is a leg of a human being or any other being.,

kAl (General) - is a leg of an object like a table, chair etc.,

kAl (Tamil literature) is the air

kAl (Arithmetics) is a quarter.

## **5. Impediment**

Script is one of the impediments.

Roman script is common for all European languages with some marks or differences. Both vowels and consonants are continuously placed. So, it is highly adoptable in various circumstances including Software development.

The difficulty in Indian Languages in this aspect is that in each language vowels and consonants are taught separately. So, there is difficulty in arranging the letters in the keyboard on the basis of the frequency of occurrence. The IT experts should find a solution for this. Attempts are being made on this line. For example, Prof.V.Krishnamurthy of Learn fun Systems suggest that by the use of mouse, the Tamil letters can be formed. He is at it. A solution to this will help the Tamil knowledge Engine usable easily and efficiently by one and all.

## **6. Conclusion**

It is envisaged that hopefully in a near future, the Tamil knowledge Engine will be developed to such an extent as to cater to the needs and enquiries of the common man in all the essential fields like Agriculture, Medi-care, Trade and Commerce, Economics, Share market etc.,

This is an attempt of a non-technical person to induce an interest in the technical experts to go in search of a Tamil knowledge Engine. The paper attempts to give an outline of an ideal Tamil knowledge Engine.

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