## Analysis of relative merits of Tamil99 and Thunaivan Keyboard layouts in a Malaysian context

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## Abstract

Since the release of the Tamill 99 keyboard layout, there has been no discussion of the relative merits of this layout relative to other existing layouts. Due to the fact that the keyboard has been officially endorsed by the Tamil Nadu Government it is generally assumed by lay persons that the keyboard layout is superior in design to all existing keyboard layouts.

It is the purpose of this paper to assess the relative strengths and weaknesses of the Tamil 99 keyboard design in relation to the Thunaivan design.

The Thunaivan layout will be used for the comparison because of its widespread use in Malaysia and also because the design goals of the Thunaivan keyboard is very different from that of the Tamil 99 layout. For the sake of simplicity and cost constraints only these two designs will be compared. Others can use the same or similar methodology to assess other keyboard designs.

To test the relative merits of these 2 designs, statistical data will be used analyse the relative efficiencies of the designs with relation to :

- 1. No. of keystrokes used.
- 2. Relative frequency of the fingers used.
- 3. Physical location of frequently used characters

Further to this, the 2 keyboard will be tested in a classroom setting of primary school children to collect the following data :

- 1. Variation in typing speeds between the 2 groups in controlled testing over time.
- 2. Variation in acceptance of the designs between the 2 groups.

A comparison of the different design goals and the effect on users will also be included.

It is hoped that the results obtained from this analysis will provide the necessary data to make the necessary decision in desciding between keyboard choices in a Malaysian context.