

Indian Languages on Mobile

Vijay Narayanan-Saroja

Nokia Research Center

A brief overview of Indian language use in mobiles & Possibilities for standardization



Over One Billion People...

...with Over 600 Million Mobile Users

One Country...

...22 Major Languages with 11 Different Scripts

Typing in Mother tongue...

...is almost non-existent



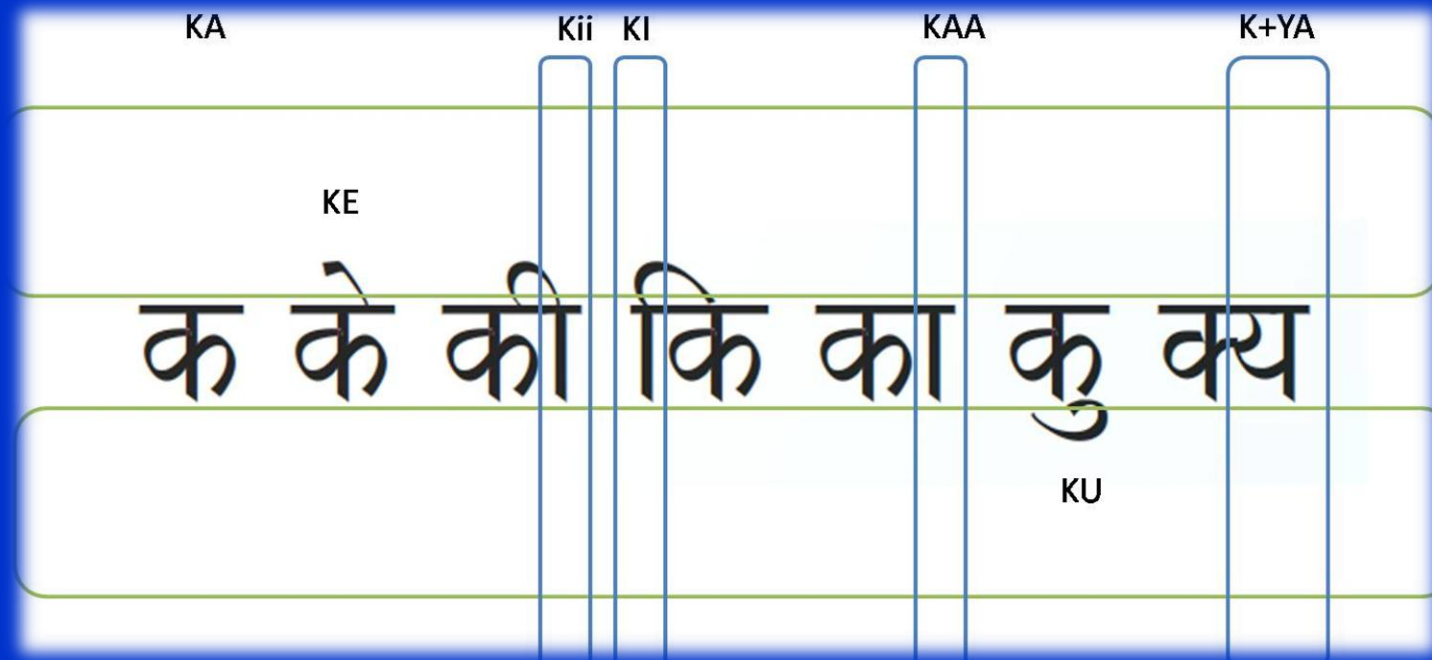
Current Text Solutions...

Require English Fluency or...

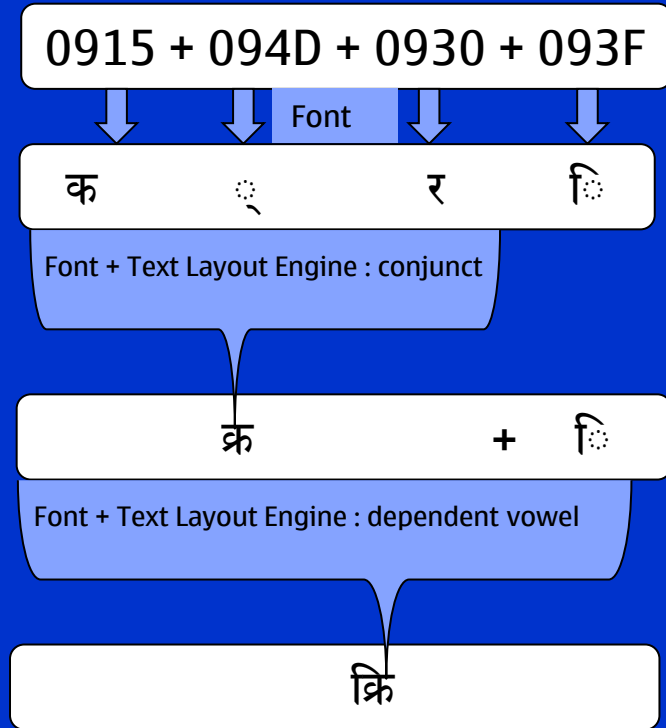
...Expertise in Script Grammar

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Hundreds of Unique Character Patterns are Common in Indian Scripts



Indian Language display



Data Transmission

Fonts

Text Rendering

Display

Data Transmission

- Unicode Transmission requires double SMS, double data transfer
- Data conversion is possible
- Policy change for SMS ?

Text Rendering

- Many good quality rendering systems
- Still not perfect ...

... as it is designed to accommodate many languages

	Used in	License
HarfBuzz	Qt, Google Chrome, Linux	Open Source
Uniscribe	Windows	Microsoft
IcuLayout	Java, Symbian	Open Source
Pango*	Maemo, Firefox, Linux	Open Source
	Most feature phones	Proprietary systems

Text Rendering - possibilities

- HarfBuzz-ng (next generation) needs more effort for Indian languages
 - This could become de-facto standard in open source world
- Reference test suite or test certification ...
 - ... to ensure quality of Font + rendering system

Text input – ITU-T keypad

- Most manufacturers have own keypad
- Multi-tap on ITU-T is difficult with more number of alphabets
- Standardization could help ...
- ... But could also be an issue for consistency from previous devices

Text input – Qwerty & Touch

- Comparatively few existing devices
- Easier, as less key press
- Touch can support multiple languages

Future possibilities

- Upgrades for Unicode ...
- Novel input methods ...
- Smarter display techniques ...