

अब आप आसानी से किसी भी
भारतीय भाषा में SMS भेज सकते हैं।*

पाणिनी कैपैड

Panini Keypad

SMS
COMPRESSION

तीन SMS एक SMS के
खुद में भेजें।

Hindi
Bengali
Telugu
Marathi
Tamil
Gujarati
Kannada
Malayalam
Oriya
Punjabi
Assamese

*Panini is a new multilingual Keypad system supporting
11 languages of India.

The software Panini Keypad can be used on any phone with java support.
You also need to have the fonts of the language that you want to use the phone in.

Panini Keypad is offered in several different versions:

Panini Basic Offers an easy means to type in all the Indian languages,
SMS compression, converting between languages, Mailbox, etc.

Panini Clever Offers the features of Panini Basic plus offers Clever
Texting mode on one Indian language. Mode Clever offers statistical predictive
texting which makes typing very easy.

Panini Premium Offers the features of Panini Clever plus offers
superior Predictive texting. Offers several different modes of ergonomic typing
on the phone.

Panini Touch Offers the features of Panini Premium along with automatic
support for Touchscreen phones. Version Touch can also be used in non
Touchscreen phones where it will support keypad and function normally.

लुना एरगोनॉमिक्स प्राइवेट लिमिटेड

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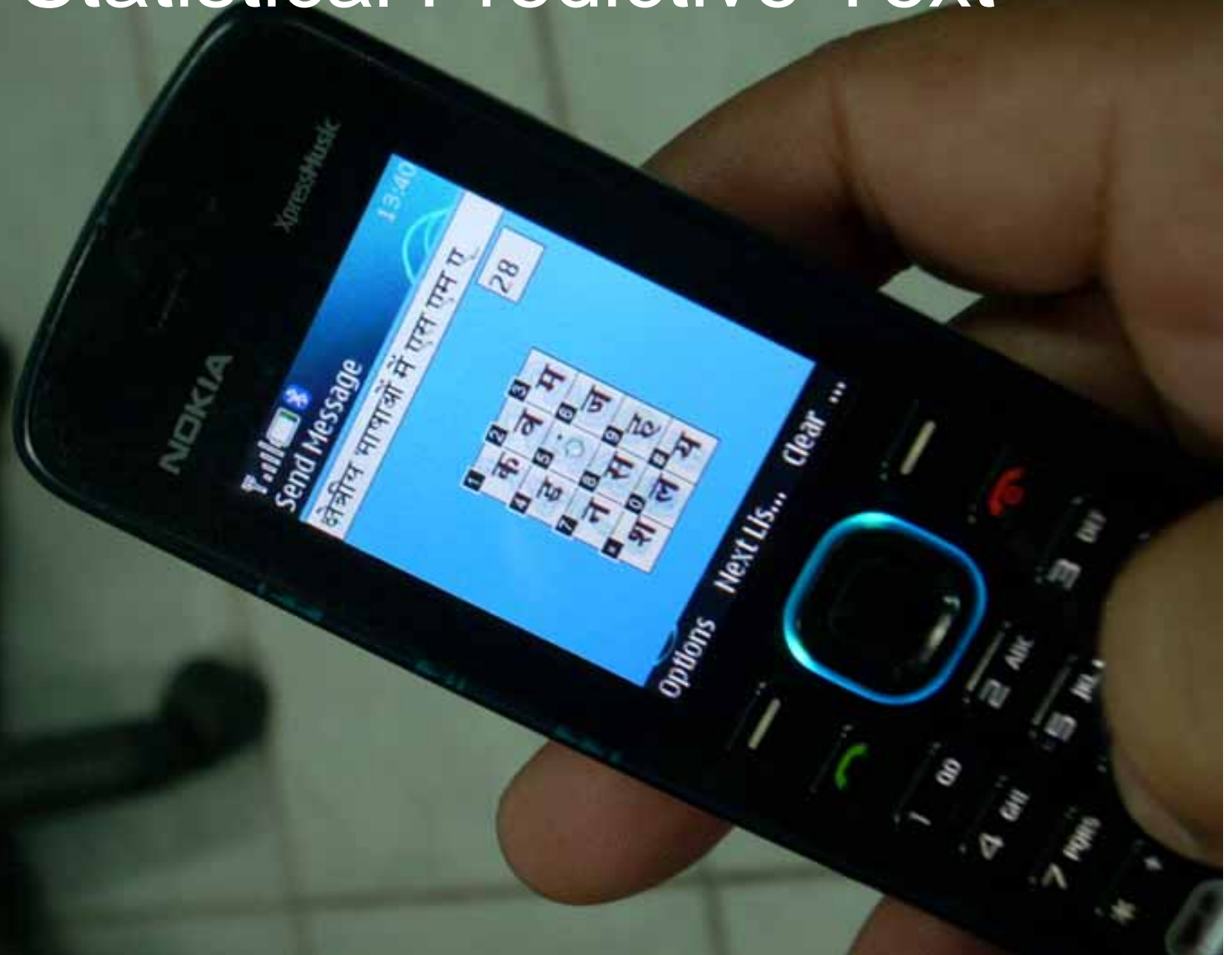
Panini Keypad

- Multilingual Keypad technology for India.
- Offers a means for easy typing and sending of SMS in 11 major languages of India.
- Does not require application at receiving end.
- Several patented new technologies.
 - Dictionaryless Statistical Predictive Text
 - Ergonomic keypad
 - Single keypress typing
 - SMS Compression
 - Automatic transliteration
- Panini Keypad : Winner of Judges Choice award at NOKIA Global Innovation contest (Sept 09) as a Mobile Necessity for Emerging Markets.

About Us

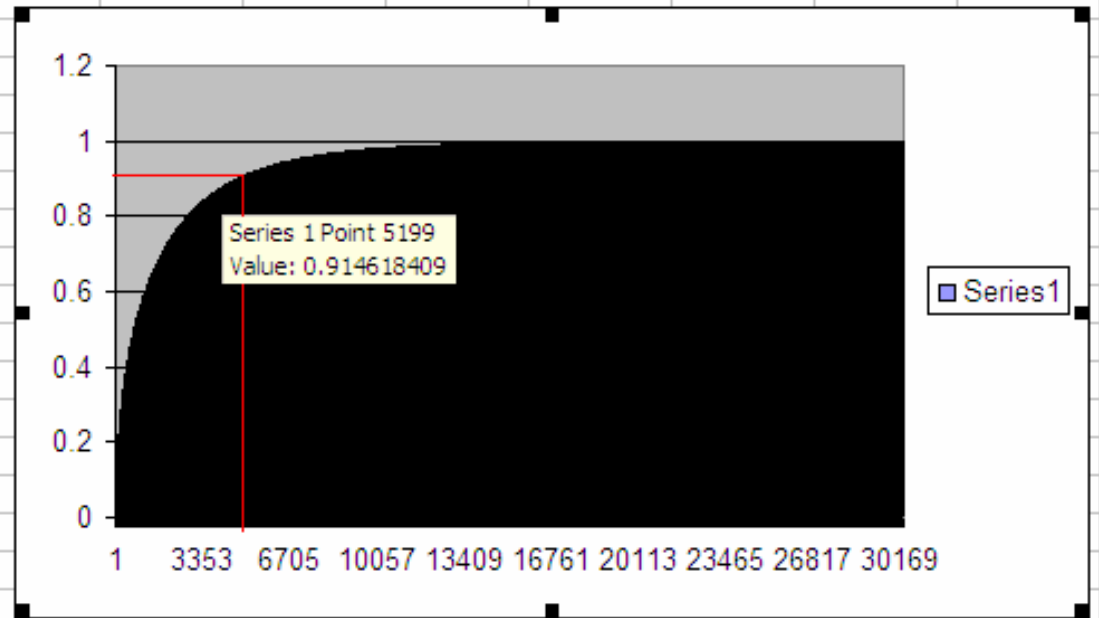
- Luna Ergonomics Pvt Ltd
- Founded by Major Abhijit Bhattacharjee. Telecom Engineer and technologist.
- Based out of Govt supported Science and Technology Entrepreneurs Park, Noida.
- Developers of CleverTexting : Statistical Predictive Texting Technologies.
- Have developed technologies for Indian languages and all major languages of the world.
- English, Spanish, Portuguese, **Arabic**, French, **Hebrew**, Swahili, **Russian**, Finnish. Work on for CJK languages.
- IP extensively covered by 4 patents and international publications.

Statistical Predictive Text



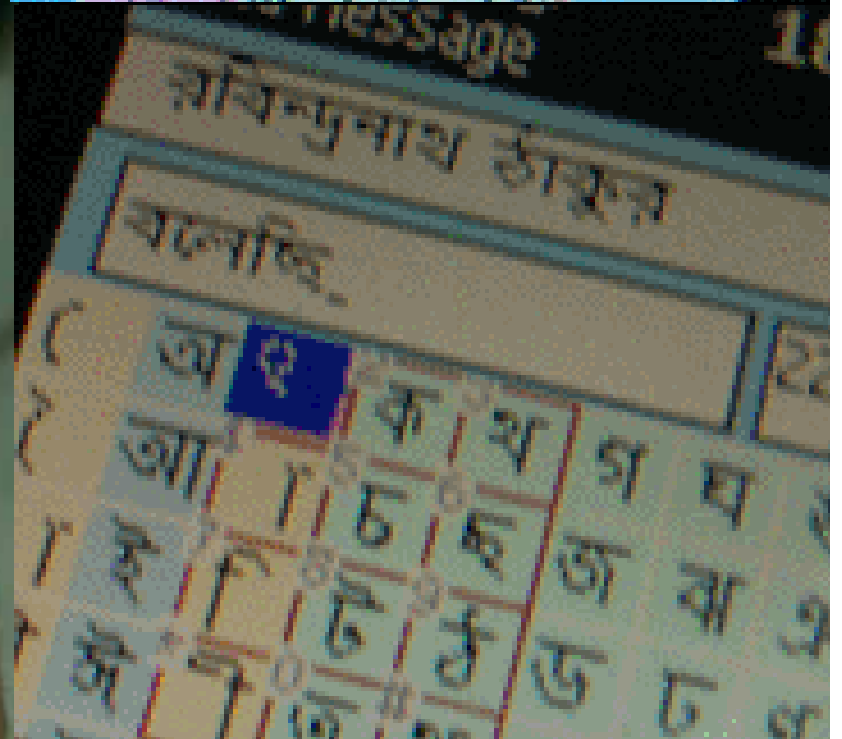
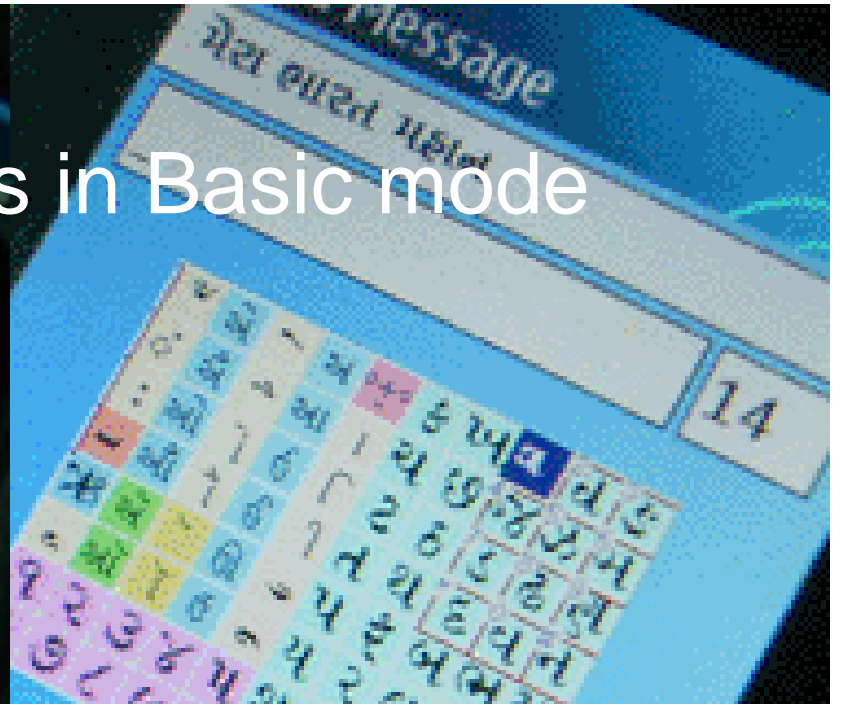
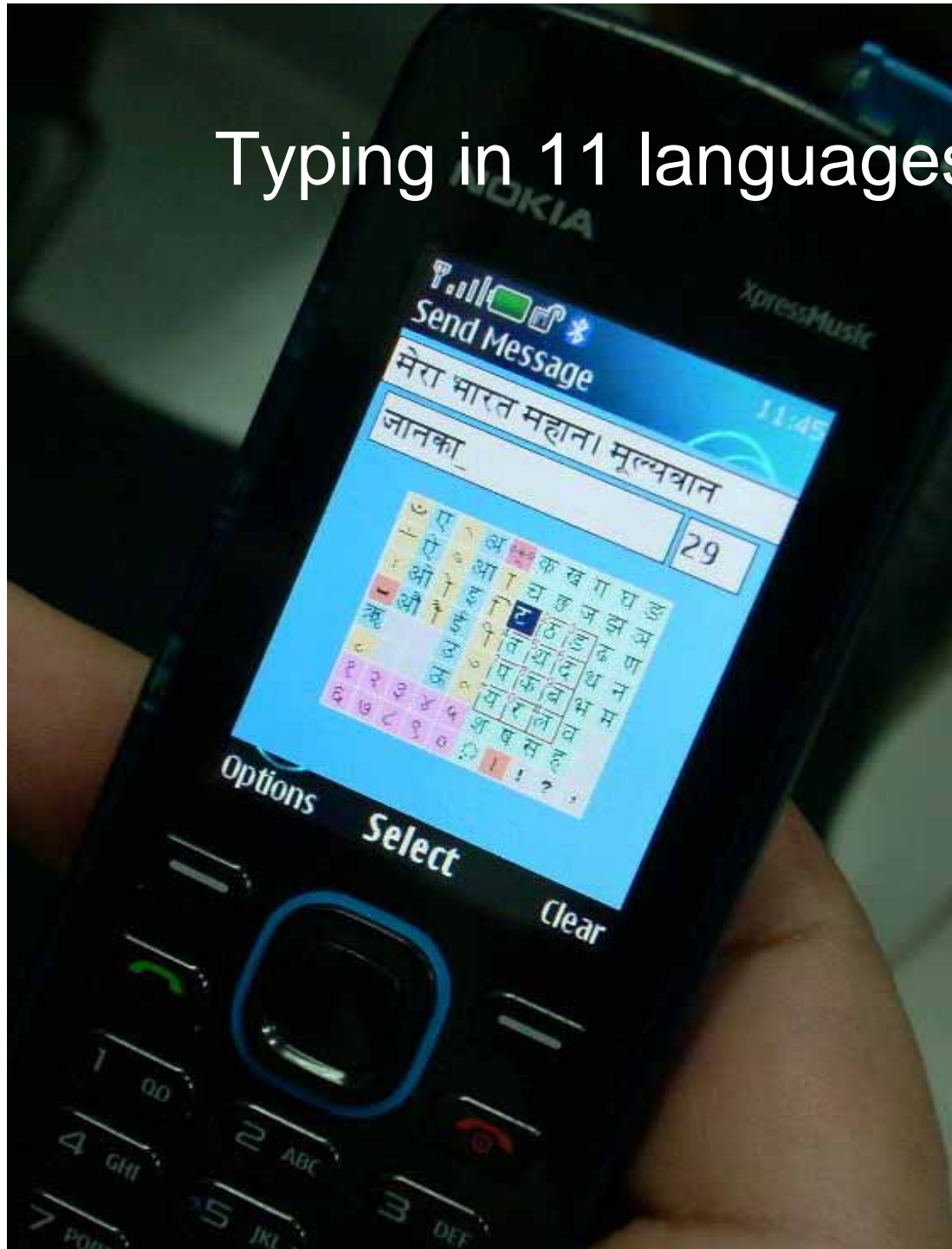
Why CleverTexting works for all languages of the world

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	elle	150440	0.007096	0.007096			21201959						
2	ment	133437	0.006294	0.013389									
3	emen	95314	0.004496	0.017885									
4	tion	92104	0.004344	0.022229									
5	dans	88904	0.004193	0.026422									
6	pour	88051	0.004153	0.030575									
7	omme	80962	0.003819	0.034394									
8	vous	71245	0.00336	0.037754									
9	etai	69588	0.003282	0.041036									
10	mais	69513	0.003279	0.044315									
11	tait	67607	0.003189	0.047503									
12	avai	66332	0.003129	0.050632									
13	ille	65734	0.0031	0.053732									
14	ient	64176	0.003027	0.056759									
15	vait	63481	0.002994	0.059753									
16	tout	63106	0.002976	0.06273									
17	plus	61429	0.002897	0.065627									
18	comm	59879	0.002824	0.068451									
19	'est	57892	0.002731	0.071182									
20	ette	53750	0.002535	0.073717									
21	aïen	49703	0.002344	0.076061									
22	aire	47493	0.00224	0.078301									
23	nous	47188	0.002226	0.080527									
24	atio	46588	0.002197	0.082724									
25	leur	46066	0.002173	0.084897									
26	onne	45388	0.002141	0.087038									
27									

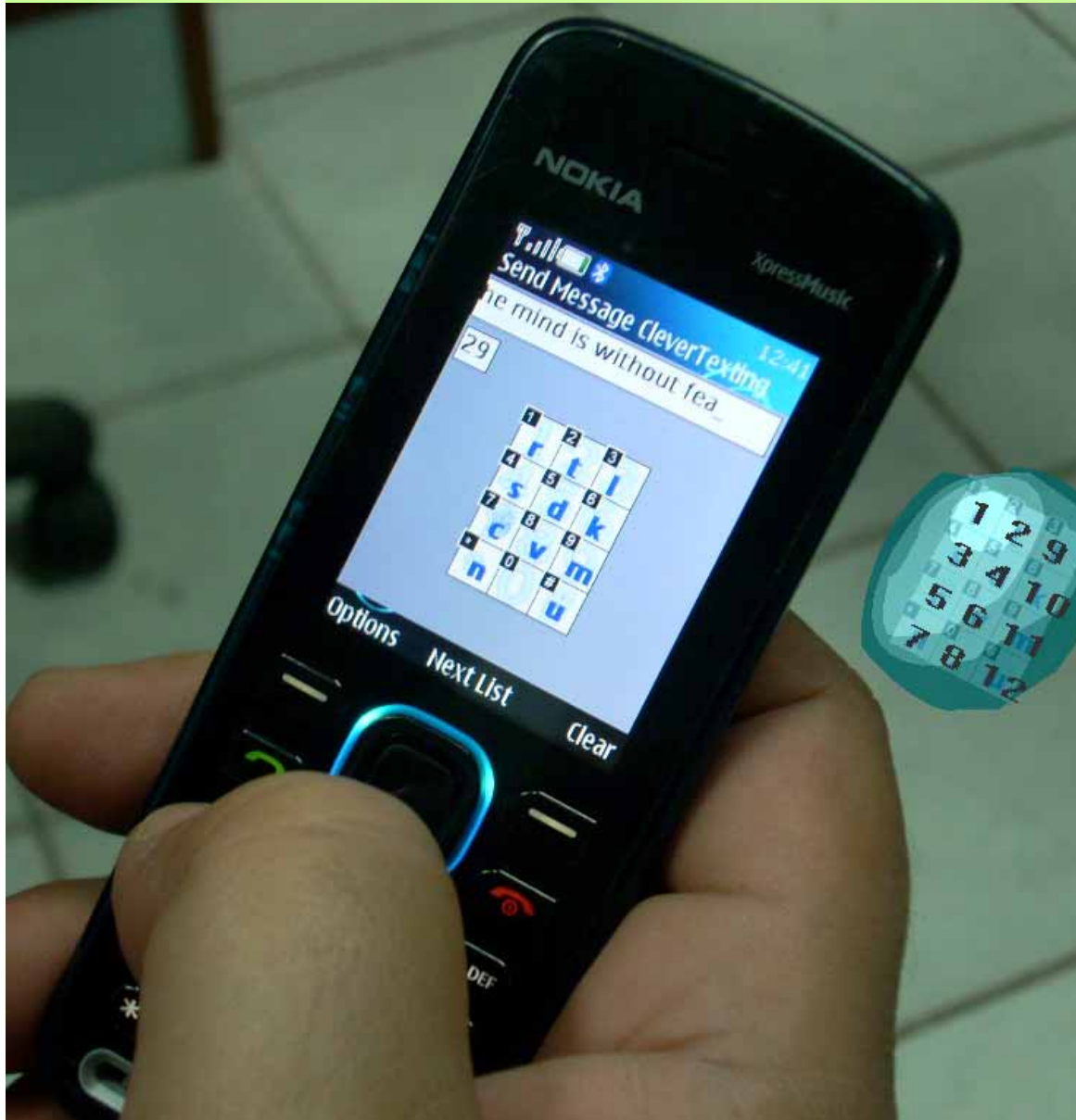


One percent of possibilities make up 90% of all occurrences

Typing in 11 languages in Basic mode



Ergonomic – Worlds first



- Concern for the Thumb.
- “Thumbs up to a new way of texting”
Cover story, Ergonomist Society, UK. Mar 09.
Powerful, promising, full of new possibilities.
- Single Keypress typing - always.



Look from the North west corner.

Most often you would be typing on the very same key.

There is learnability because you know where your starting characters are.

And after the first character has been entered, the system is already predicting well for you and placing characters at your fingertips.

Automatically swaps when held in the left hand

Automatic support for Touchscreens



Nearest key mode for Touch Screen phones

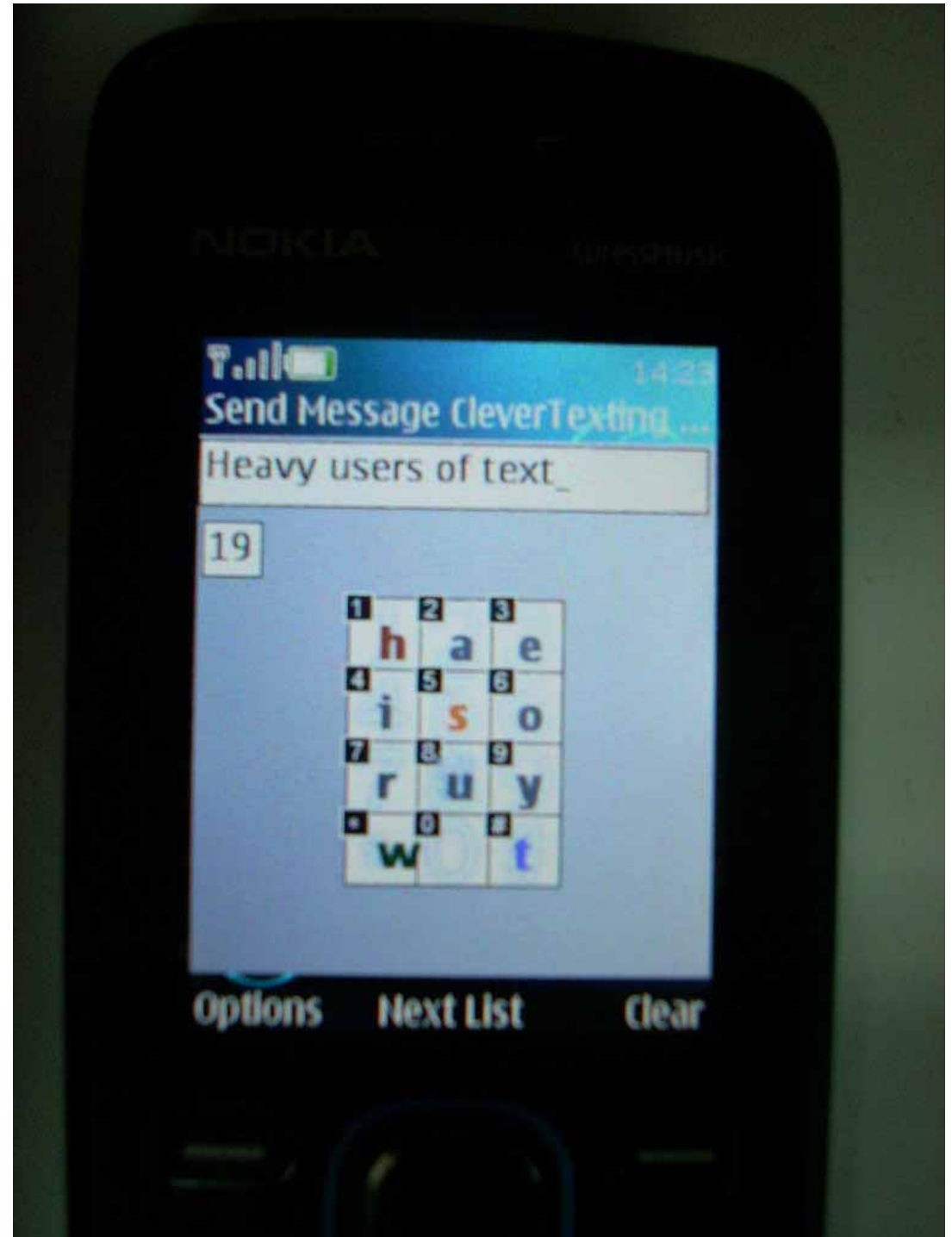
Several modes supported

Ergonomic

Ergopersistent

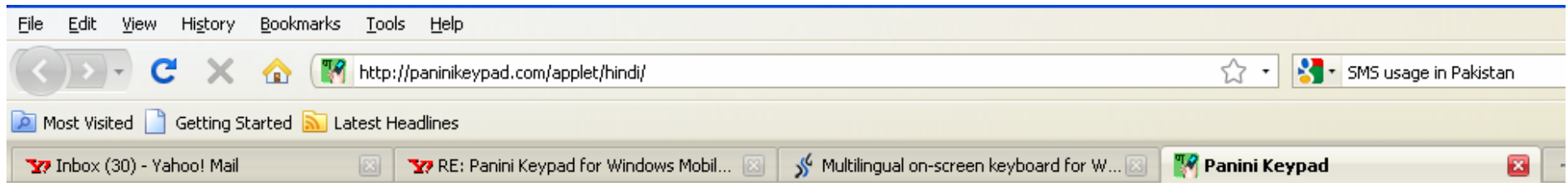
Legacy Colour

Nearest Key



CleverTexting™ offers

- Statistical Predictive Texting : Dictionaryless
- Single keypress typing always.
- No multitap, no chording, No mode change, no disambiguation.
- Easy to learn and operate, even for the aged.
- Is the fastest input system ascertained through trials.
- Ergonomic to the thumb with several options.
- Support for multiple language on the same keypad.
- Equal ease for non dictionary words.
- Operate without glasses or in darkness.
- Improves spelling habits.
- Smooth seamless typing experience.
- Touchscreen ready.



- Click on the icon on the right to type in Hindi.
- A java applet will quickly load and you will see Hindi characters on screen.
- Click the character you want to type.
- If the character you want is not on the list, click on the green area outside for the next list.
- The Panini Keypad tries to predict characters as you type and places them on the limited keypad for you.
- Start looking from the NorthWest corner of the grid for best results.

Happy CleverTexting on Panini Keypad.

रमेश चन्द्र अग्रवाल णि

कानपुर देहात णि

मेकानिक णि

मैट्रीक पास णि

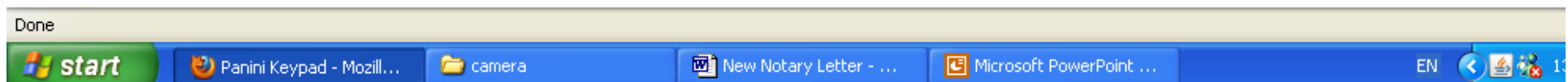
Powered by

Type Help

क	ह	अ
स	म	व
प	ब	द
ज		न

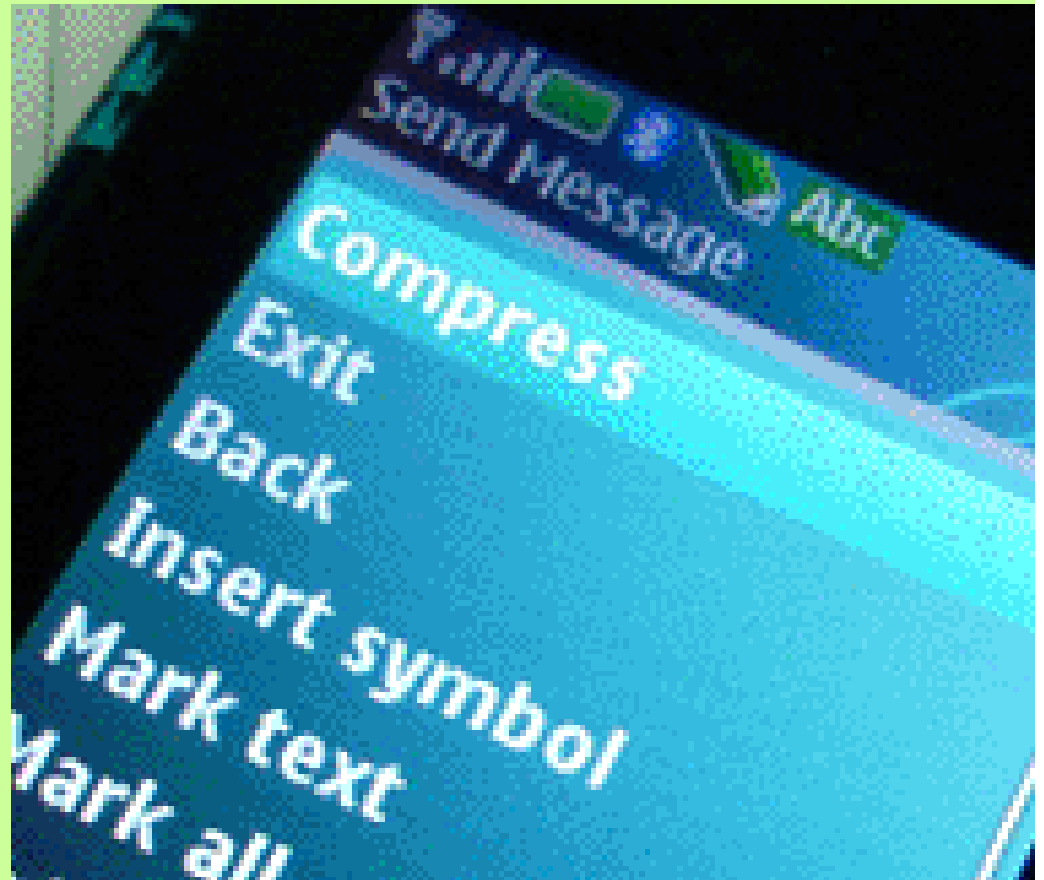


Same usability for the web and other devices



SMS Compression

- Increases payload of standard SMS by 300% for Indian languages.
- About >200 characters.
- Allows insertion of English words.
- Secure encrypted communication.
- Work on to increase compression.
- Worlds first onphone SMS compression.



Automatic Transliteration

- Between all Indian Languages.
- Support for English transliteration.
- Support for a artificial Pan-India vector script called Shiva.
- Transliteration after receiving message offered.



Requirements

- For the current Java implementation
 - Java enabled phone
 - Presence of Indian fonts on phone
- Already working well on majority of popular java phones.
- Can be easily developed for other platforms, BREW etc.
- Other implementations including silicon implementations and SIM implementations are viable and being explored.

Competing Technologies

- Transliteration
Mismatch with target user group. User doesn't know Kya likhle ke liye k,y,a linkhna parta hai. He is unfamiliar with English alphabets.
Slow and user has to type with multitap in English.
 - Double Tap
Cumbersome, slow.
 - Dictionary lookups.
Everyone in this room would spell antarashtriya differently, so which key sequence will predict the word?
Dictionary collisions.
- Multitap
Unwieldy, unusable, too many taps (7 or 9 taps).
The user has to reckon number of taps from memory.

Software Copy protection and Registration

- Reliable Scratch card based registration system in place. Adequate scratch cards available.
- Foolproof Server based authentication with excellent MIS working.
- Technology and infrastructure already in place to scale up to 10 million user base quickly.

Many different productisations for Handset manufacturers and Telecom operators.

- Embed usability.
- Monthly VAS subscribed service.
- Bundle offers SMS packs
- With phone connections
- With handsets
- Counter based control possible.
- Time based: Unlimited SMS per day for x.
- Etc.

Thank you

Questions