Comparisons between EkaPad and other data entry devices

Measures/ benefits	EkaPad	Full size qwerty keyboard	12 key layout (10 key data entry)	Miniature qwerty & touch screen displays	Other qwerty like key-board solutions	Non-qwerty solutions: historical, investigative, in/out of production
Particular types and examples	**USB EkaPad** 12 key single handed chording key-board: all regular charac-ters plus memory; mobile with freedom of position & posture.	**Worldwide standard** for over 100 years. Multiple manufacturers and languages. Typewriters, teletypewriters, computers, PDAs, data entry tools.	**Land line phones** since 1960s. All early and most current cell phones. Some data entry tools.	**PDAs, smart phones, tablet computers**	**Kinesis & others**: key placement curved, vertical or twisted. ('ergonomic") **FrogPad:** 1 hand 20 key table top keyboard **Half qwerty**: arm strap	**Chording keyboards:** Englebart, Twiddler, Batt, others **Gloves & frames**
Ergonomic	Allows complete freedom of movement. Use either hand. Fingers feel positions without looking. Allows many body, arm and hand positions for stress free repetitive use.	Requires strict and rigid body positioning to minimize repetitive stress injuries. Millions of cases worldwide of carpal tunnel syndrome.	When dialing phone numbers in normal use no repetitive stress. When text messaging, thumbs can suffer from repetitive stress.	Requires either two hands or a flat surface. Touch screen keys have no sensory feedback, and require careful looking. Thumb use can cause repetitive stress.	Some non flat keyboards claim to reduce carpal tunnel syndrome. Others are single handed but don't reduce repetitive stress.	Some non flat keyboards claim to reduce carpal tunnel syndrome. Others are single handed but don't reduce repetitive stress.
Mobility	Needs to be attached to the computer, preferably with display visible. Doesn't need flat surface. Really one handed, fully functional.	Not mobile. Laptop computers work best on a flat surface. When used on a lap keying can be uncomfortable.	Even though these are mobile, for texting both hands are required. Smart phones need to be held with one hand while other hand keys or gestures.	These are mobile, but require two hands for texting and surfing.	Most require a flat surface -they're not mobile. Some can be strapped on arm, giving some mobility. Some have Bluetooth™.	Twiddler was mobile, similar to EkaPad. Some reguire flat surface. Gloves are mobile.
Typing speed words per minute	Composing speed. 40 to 50 wpm. Faster data entry for repetitive text from memory. Fast editing: one hand always on EkaPad, other hand on mouse. Also flat surface 10 key device.	Composing speed, up to 100 wpm. Fastest typist (copying) 250 wpm. No memory. When editing, use either arrow keys or move one hand to mouse.	Slow composing speed, Software can improve speed. Skilled data entry people can enter numerals at 300 characters per min.	Slow composing speed, Some people text with thumbs at 30 to 40 wpm. Handwriting recognition is sometimes used.	Composing speed, up to 100 wpm. No memory. When editing, use either arrow keys or move one hand to mouse for each correction (slow).	Composing speed 40 wpm Some have simplified chording with reduced character set. Experimental devices have claimed faster speed.
Memory	100 Keep registers store text strings, up to 50,000 characters stored in total. 100 ShortCut registers each store up to 6 command/ symbol chord sequences.	No memory, ShortCuts often require two hands to implement.	Store hundreds of phone numbers and contact information.	Store hundreds of phone numbers and contact information. Memory does not support texting.	No memory, ShortCuts often require two hands to implement.	Twiddler had memory and allowed the user to totally manage chords. Most others had no memory.
ASCII set, plus up to 1000 char-acters)	Full character set	Full character set	Reduced character set	Full character set	Full character set	Reduced character set
Personal	Stores passwords, names, text. Sanitary. Use on other computers. Belongs to you, not the computer.	Typewriters were personal. You can't take the com-puter keyboard to another computer.	Cell phones are personal.	Small computers can be personal.	These keyboards maybe personal, but they are hard to move.	Gloves are very personal.
Historical: response to change, or innovations	Response to handhelds, repetitive stress injuries, mouse usage, and need for key stroke memory.	Typewriters in produc-tion 1870s. Keyboards for computers came from teletypewriters. All qwerty.	10 key: 1930s data entry. 12 key phone: 1960s, adopted by cell phones.	Qwerty holding forth, just made smaller here.	Qwerty still holds sway in almost all text entry keyboards.	Gloves are very personal. Starting in late 1960s, and continuing today.
Price & Availability	$165. Buy worldwide via Internet.	$20 - $250. Retail, internet, available worldwide.	$20 - $450. Retail, internet, available worldwide.	$200 - $1000. Retail, inter-net, available worldwide.	$150-$500. via internet.	Most unavailable. Some hobby designs via internet.