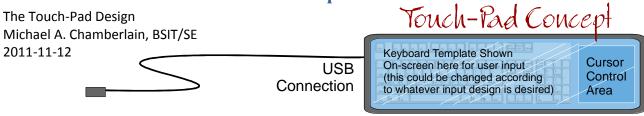
**Future Human-Interaction Device Proposal** 



(Keyboard & Mouse replacement)

The question begs to be asked: "What is the future of the keyboard as we know it?"

Consider that the current keyboard and mouse may well be replaced by a "Touch-Pad" concept.

Latest trends in Information Technology (IT) show considerable shifts toward mobile-devices and touch-screen human-input. Contemplate how amazingly long the standard US keyboard has survived in the face of such fast-paced IT developments over the past two decades. At some point, we must admit (as strong a friend the keyboard has grown to become) that the keyboard is now holding us back.

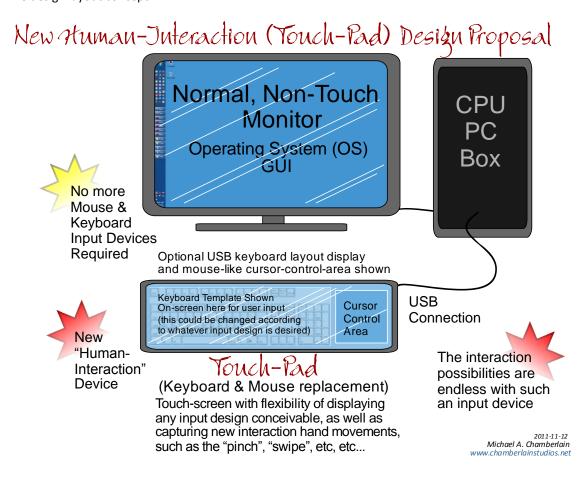
Bearing in mind the fact that human-input is leaning toward the touch interface, also take into consideration the point that no fulltime office worker desires to return home with arms about to fall off the shoulders from reaching out and touchinteracting with a monitor in front of them all day long. Those who constantly interact with the binary brain must embrace a compromise between the iconic keyboard and a touch-screen monitor. I personally envision a USB-driven touch-pad (possibly of a rubberized material, similar to a mouse-pad, but most-likely a hardened screen material similar to a notepad/tablet screen - at least, at first) sitting in front of the user, mimicking hand-movements/touches on the monitor screen in front, interacting with the Operating System (OS). This design would shatter the keyboard limitations, and still allow keyboard templates to be used when desired by the user. If a note-pad/tablet screen was used, digital overlays could be applied to represent keyboard layouts (types optional to the user), game consoles, even aircraft controls (for flight simulators). The possibilities are endless. The user would no longer be at the mercy of whatever physical-style keyboard was sitting in front of them at the machine (i.e. my personal discomfort is finding myself in front of the ergonomic styles I run into when assisting users; they seem to enjoy eating passwords when I can't "feel" the normal password-entry keypattern in front of me). For those who love the feel of keys under their fingers, I can imagine a rubber-molded, slightlyraised physical lay-over keyboard on the touch-pad; when the finger depresses the raised key, the pad underneath is activated, matching the digital template. Touch-menus could also be integrated into the device (preferably along the edges), controlling items such as volume, display zoom, input-template options such as US keyboard layout, keypads, game console choices, etc. – even additional language templates.

Think about browsing through a digital document, moving pages with a simple swipe on this new device (just as is already being done on note-pads/tablets, smart-phones, digital readers, etc. - but at the comfort of a large-scale desktop workstation).

At some point, we need to open our minds to the possibilities of increased human-"interaction" (more than just human-input) with the usability of our data-systems and business processes to gain. The keyboard is an unnecessary limitation we are placing on ourselves now. Think of how we could improve efficiency by breaking out of the keyboard and mouse mold.

Imagine the possibility and flexibility of users designing their own input-interface. Users could design their own keyboards/input/command consoles from the ground-up, if desired. Software designers could create any interface they wish to interact with users. The way we look at front-ends, back-ends, data-sources, services, widgets, and interfaces could all change. The barrier between the digital environment and our human interaction will begin to blur. The accuracy and effectiveness of our digital tools could increase exponentially, especially when we can make computer interaction easier and perhaps even enjoyable for even those technically-challenged.

Figure 1: The design layout concept:



This "touch-pad" input-device concept would allow anything to be programmed/designed for the input-device screen in front of the user, while allowing the current monitor design to stay as-is (non-touch).

The graphic shows a keyboard and mouse-like cursor-control area layout, but could be anything depending on the software designers' wishes and/or the users choice. Human-input could also be improved with the use of an optional stylus for those users needing very controlled interaction, such as graphic-designers. This style of interface could simply be downloaded (a file-choice of the user or software designer). This device could also be easily cleaned and stored in any current space or area designed for a keyboard to rest.

Common-thought leans toward the idea that most command-driven interaction will soon be primarily delivered via voice-command; however, we still have to allow for handicaps, those who are otherwise digitally challenged, and those who would simply prefer touch-interaction. If we do advance past physical touch at some point, a manual/touch-interface of some kind will still be needed for many low-level interaction/tasks where a full interaction OS may not be yet available (such as BOIS/CMOS configuration, etc.). Consider what was posed by the movie "Real Steal" – Whatever the circumstance, we may still need a secondary, manual input device - if nothing else, for backup purposes. In all things, the flexibility of options increases success and longevity. I'm certain all us programmers will still require an old reliable keyboard on-hand for very low-level interaction, maintenance, and troubleshooting work. However; in the long run ...

... This concept would (I believe) be the next logical step in machine-level interaction.