
Innovation and the interface! Out with keystrokes, in with spatial

When I was in high school, if you could type 65 words per minute you were almost guaranteed a job when you graduated. Yep, 65 wpm was the equivalent of running like a scalded dog! Our daughter, who has several years to go before entering high school, is now interfacing with computing technology without using a keyboard. She uses her feet— with the foot pad used to play the game “Dance Dance Revolution.” Beyond that, virtual, neural, and spatial interfaces are already here, any of which could change how customers deal with banks.

When I was going through high school, typing was an elective course, but one that almost everyone said was one that every student should take. The benchmark of typing was your words per minute. If you could type 65 words per minute (net of errors) you were almost guaranteed a job when you graduated. Yep, 65 wpm was the equivalent of running like a scalded dog! I must confess that the personal computer, the word processor, and spell check had not been invented yet. So I am dating myself, but I think young!

When our son went through high school, the technology had shifted from typing to keyboarding. The focus was memorizing the “keyboard landscape relative computer syntax” (that’s sort of typing). The benchmarks in the context of keyboarding has to do with interacting with a computer program and making changes before producing a file, printed report or message.

A 21st century observation indicates this interaction is changing again, and it is nothing short of amazing! Our daughter, who has several years to go before entering high school, is now interfacing with computing technology without using a keyboard that delivers instruction one keystroke at a time. How old school is that?

How is she communicating with technology, but not using a keyboard? Her feet. You need to look towards the lifestyle of the “digital native” to understand the connection. These new and emerging interfaces manifest themselves in the form of video gaming products. Yes, video gaming, and most of us post-high schooler’s don’t even realize it.

Today there are four basic categories of computer interfaces that the digital native uses or will be soon be using. Three are in production and are readily available. One will soon be exiting the prototype design phase. The first is a kinetic interface—the one my daughter is using. Simply stated, it's a physical interface with the computer like the foot pad used to play the game "Dance Dance Revolution." In other words, your foot is the mouse! The future implication; it won't be long before the foot pad morphs into an icon-based landscape significantly transforming the device and expanding the utility!

Next is the virtual interface, such as the Nintendo Wii, a wireless hand-held controller that is used to provide instructions to the game unit as you move the controller. Bytes converted into the swing of virtual baseball bat.

Third is a neural interface. A headset that is worn (i.e. Mattel MindFlex game) that uses a sensor to capture the Theta waves of your brain. The game converts this information (much like an EEG that records your brain waves) into instructions that control the movement of a ball. Just think and it will move! This is not science fiction; it is real and working today. Taking the concept farther, at some point, if the brain can provide output in the form of Theta waves, logic would dictate that at some point we should also be able to receive input in the same form.

Finally there is the spatial interface which is in the prototype design phase and introduced at this year's Computer Electronics Show. A user stands in front of a computer monitor, the monitor detects your presence, calibrates you (size and location) then through your hand movement converts the information into instructions for the computer.

How does all of this relate to banking? Well, establishing a future perspective in regard to technology trends is hard to do in an industry that is based on risk avoidance. Understandably, being sequential in technology purchases (buying the next version) or reacting to the competition after they have purchased and installed something new is easy and convenient. The drawback to this approach is that you will be safe, but always behind!

Question, why are financial institutions spending so much money on kiosks? They should be developing interfacing technology!

— Dan Fisher (The Wombat!)

About the Author

Dan Fisher is president and CEO of The Copper River Group, a consulting firm headquartered in Fargo, N. D., that focuses on technology and payment systems research and consulting for community financial institutions. For nearly 30 years, Fisher has worked in the financial industry using technology to improve the bottom line. He was CIO of Community First Bankshares (now part of BancWest), has served as a director of the Federal Reserve Board of Minneapolis, the chairman of the American Bankers Association Payment Systems Committee, a member of the Independent Community Bankers of America Payments Committee. Fisher has written numerous articles on banking technology and the payments system. He has authored or co-authored six books and recently published a book titled, *Capturing Your Customer! The New Technology of Remote Deposit*. You can contact Fisher at dan@copperwombat.com.

P.S. To understand Dan's nickname, check out "About the Wombat" on his website, www.copperwombat.com.