BOSTON - Microsoft Corp.'s Windows operating system offers several ways for people with disabilities to tweak the software. There's a screen magnifier for the vision impaired, for example, and ways for people with limited dexterity to use the keyboard instead of the mouse.

But a few years ago when Microsoft researched how those technologies were being used, ``most people didn't know about them,'' recalled Rob Sinclair, head of Microsoft's assistive technologies group.

That was particularly disappointing because the same research showed that accessibility-enhancing functions didn't just affect a small subset of users considered to be somehow ``disabled.'' It turned out that 57 percent of computer users between 18 and 64 could benefit from some such feature, such as increasing text size or screen contrast to ease the job for tired eyes.

These realizations sparked an overhaul of how the world's largest software maker deals with disability access technologies, changes that will appear in the next generation of the company's flagship programs. Rival Apple Computer Inc. also is planning to upgrade the accessibility of its upcoming operating system for Macintoshes.

The approach is partly motivated by the aging of the baby boomer generation. But it also is part of a rising trend in design: that improving disability access can make products easier for everyone for use.

Bill Gribbons, director of the Human Factors in Information Design program at Bentley College, cites the example of appliance makers that have been trying to make washers and dryers that don't require elderly users to bend over as much.

``When they do that for an older person, you know what, I like that dryer better as well,'' said Gribbons, who is 48.

Microsoft says this principle will be apparent in Office 2007, the next incarnation of the company's widely used package of ``productivity'' programs such as Word and Excel.

Partly because of complaints from users with disabilities about how many steps it took to do common activities such as changing fonts or copying and pasting text, Office 2007 will scrap the traditional ``menu'' layout that has been in place since the 1980s.

In its place will be a graphical ``ribbon'' that offers quick access to the most common functions a user might need in a given program.
For years, accessibility enhancements in Windows have been stashed behind a wheelchair icon in the software's `control panel.' That was a big turnoff for many people who don't consider themselves disabled.

So Microsoft's newest operating system, Vista, due later this year, will combine the accessibility tweaks and some new ones, such as speech-to-text software and greater screen-magnification powers, in a prominent, more universal `ease of access' center on the desktop.

The center will be far more user-friendly: It will ask questions about users' physical capabilities and suggest certain settings as a result.