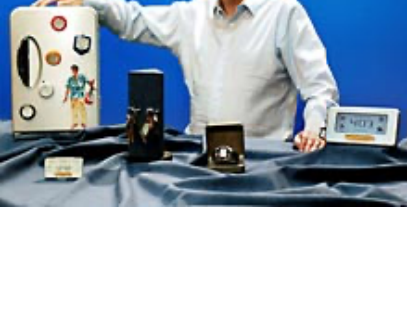


Microsoft Launches Smart Personal Object Technology Initiative

November 17, 2002 |



Microsoft’s Bill Gates previews examples of Smart Personal Objects Technology (SPOT), including a travel clock, key chain and wristwatch, in Las Vegas, Nov. 17. Click image for high-res version.

REDMOND, Wash., Nov. 17, 2002 — At COMDEX Fall 2002 in Las Vegas, Microsoft Chairman Bill Gates introduced the Smart Personal Objects Technology (SPOT) Initiative, aimed at improving the function of everyday objects through the injection of software.

A range of new technologies including a low-distraction user interface, a new operating system platform, and new communications capabilities have been developed in the labs of Microsoft Research (MSR). PressPass asked **Bill Mitchell**, general manager of the Microsoft Personal Objects Group, to explain Smart Personal Objects and why this technology is significant.

PressPass: What are Smart Personal Objects?

Mitchell: Smart Personal Objects are everyday objects, such as clocks, pens, key-chains and billfolds, that are made smarter, more personalized and more useful through the use of special software. These everyday objects already exist in huge numbers, and, of course, all of them already have primary functions that people find valuable. So our goal is simply to improve on these core functions to make these new, smarter objects that are not just useful but indispensable.

As an example, consider time-displays like watches and clocks. With the right software and hardware, these timepieces could be augmented to do a much better job. They could provide more accurate, perhaps atomic-clock-accurate, time displays. They could also be extended to display not just time, but timely information — traffic information, schedule updates, news — anything that is time-critical and useful to people. Smart key-chains, of course, will have to be improved along different lines: they need to help people with the task of physical security, of locking and unlocking things. There are lots of great device opportunities here, and the really neat thing is that we don’t have to hard-sell customers on all sorts of whizzy new customer scenarios.

Our initial focus has been on devices like the Smart Alarm Clock that Bill Gates showed on stage at COMDEX Fall 2002, which is a clock that has been improved through some low-cost, highly integrated hardware, novel software and user-interface technology we’ve been developing. When we’ve shown prototype devices to potential customers the responses have been very positive.

PressPass: How do Smart Personal Objects differ from other mobile and wireless products?

Mitchell : Mobile computing appliances like Pocket PCs and SmartPhones are really computing chameleons. They are designed to host a bunch of different applications and service a wide range of new customer needs. The “why to buy” for these devices often centers on an aggregation value proposition. That is, with Pocket PC, I get an organizer and a phone and a Windows Media Player and a note-taking device all in one package: heck of a deal, really.

Smart Personal Objects, on the other hand, are simply enhanced along core functionality lines. We wouldn’t add digital-camera or mobile-phone technology to create a smart wristwatch, for example, because this technology would not enhance the key function and purpose of the watch. We believe that very specialized user interfaces are required of Smart Personal Objects as well; it’s not a one-size-fits-all kind of space. Smart PersonalObjects, in a perfect world, will almost blend into the background, and distract you as little as possible. Most other computing platforms, because of their richness and multi-purpose nature, employ much more immersive types of user interfaces that are deep and useful but in return require a lot of attention and focus.

It’s important to note that Smart Personal Objects are not meant to compete with or take the place of these more traditional computing devices, but to actually complement them. The right tool for the right job is our mantra. There are many situations where the flexibility and power of a PC is required. But you don’t sit in front of a PC, 24-7, so we envision a world in which everyday objects can help improve your life too. Computing appliances and PCs all interacting with each other seamlessly, serving in roles that each of them are optimized toward: that’s the dream.

PressPass: To whom will these Smart Personal Objects appeal?

Mitchell: Well, we expect them to appeal to a very large audience indeed, since, remember, we’re talking about the everyday objects that people already find useful. If you think of key chains, pens and watches alone, you’re talking about hundreds of millions of units, even billions of units a year. The trick is to make sure that the core functionality, the “smarts” that we add, has the effect of improving each object in ways customers really do appreciate. That’s why we’ve spent so much time over the past three years doing focus groups and other customer testing. Customers are the litmus test for what constitutes “smart.” We can’t just re-purpose some existing technology on an everyday object and label it “smart.”

PressPass: Can you provide other scenarios to illustrate how these objects will really benefit consumers?

Mitchell: Timepieces like clocks and wristwatches are great examples of ordinary devices that could benefit deeply from the addition of specialized SPOT technology. Imagine how handy it would be to have a travel alarm clock that, in addition to telling time very accurately and auto-adjusting to time-zones, could also wake you to your favorite WMA-encoded music, display information about road closures along your expected travel route, and deliver urgent messages.

Pens are another class of everyday object that could be improved through this technology. There are a lot of different ways to make Smart Pens, but we can envision one of normal size and weight, which still writes on plain paper with normal ink, but also has the ability to transfer this information back to a PC for recognition and storage. With many of these objects, the ability to communicate seamlessly with other Smart Personal Objects, Computing Appliances, and PCs is a very important asset.

PressPass: What has your group done to make Smart Personal Object Technology a reality?

Mitchell: For the past three years, I’ve led a cross-disciplinary team of software and hardware engineers, testers, designers, usability specialists — a whole gamut of specialists really — in pursuit of all the building blocks needed to create truly useful Smart Personal Objects.

We started with the core functions and scenarios that customers told us they wanted, and worked from there to build all of the enabling technology needed, pretty much from scratch. We created a new miniature software platform that fits right into the .NET architecture so that we could leverage its great development environment and tools. And we worked with National Semiconductor to fabricate a new chipset that contains and runs the new software platform: sort of the Smart personal objects “brain” that can be dropped into objects to make them smart.

Now obviously it’ll take different brains to enable different classes of Smart Personal Objects, but the first one we’ve developed really lends itself to low-cost, low-power, small-footprint communication applications. And I’m happy to report that we received the first batches of these chips three months ago and we’re currently testing them in several devices.

PressPass: What has been Microsoft Research’s role in developing the technologies?

Mitchell: This project was incubated in MSR, like other projects that have recently come to fruition, such as eBooks (Microsoft Reader) and the Tablet PC. For the past three years we’ve benefited immensely from our interaction with the many disciplines represented in MSR and particularly from the guidance and sponsorship of Rick Rashid.

From its inception, our group has functioned as if we were a start-up within Microsoft. With top management acting effectively as venture capitalists, we went through the process of proving ourselves and screening our business plan and technology through multiple reviews. The idea was that our group and our technology would benefit from the process of screening and hard-work that start-ups go through. This results-based orientation kept us focused and entrepreneurial.

PressPass: Why is Microsoft addressing this now?

Mitchell: Based on the studies we’ve done, customers have told us they want better, more-functional everyday objects. So the question really is, can we actually make the technology to enable the vision in an uncompromising fashion? Fortunately, we benefit here from some technology confluence: a fusion of advances in both hardware and software that includes more powerful, miniaturized chip sets, a low-power wireless solution, and some novel user interface approaches to name a few.

PressPass: Given Bill Gates’ announcement of SPOT, when can we expect to see Smart Personal Objects on the market?

Mitchell: The rationale behind Bill Gates’ announcement at Comdex was really two-fold; first, Bill is personally passionate about the whole of Smart Personal Objects space and believes that this points to an evolution in the concept of personalized, ubiquitous computing. Secondly, we did want to give the industry a sneak peak of things to come: these are product concepts that we expect to yield products within the next year or so.

PressPass: What is Microsoft’s long-term vision for Smart Personal Objects?

Mitchell: Our goal is really to improve people’s everyday lives with everyday objects made smarter and more functional. Long term, this will mean billions of devices in communication with each other, including PCs and other computing devices to make our lives less complicated, more productive, and more enjoyable.

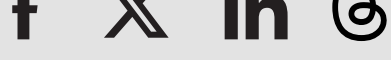
Related Posts

- Microsoft Cloud strength drives first quarter results >
- Microsoft earnings press release available on Investor Relations website >
- Siemens and Microsoft scale industrial AI >
- Lenfest Institute, OpenAI and Microsoft announce \$10 million AI Collaborative and Fellowship program for US metro news organizations >
- Microsoft announces quarterly earnings release date >

Follow us:



Share this page:



What's new	Microsoft Store	Education	Business	Developer & IT	Company
Surface Pro	Account profile	Microsoft in education	Microsoft Cloud	Azure	Careers
Surface Laptop	Download Center	Devices for education	Microsoft Security	Developer Center	About Microsoft
Surface Laptop Studio 2	Microsoft Store support	Microsoft Teams for Education	Dynamics 365	Documentation	Company news
Surface Laptop Go 3	Returns	Microsoft 365 Education	Microsoft 365	Microsoft Learn	Privacy at Microsoft
Microsoft Copilot	Order tracking	How to buy for your school	Microsoft Power Platform	Microsoft Tech Community	Investors
AI in Windows	Certified Refurbished	Educator training and development	Microsoft Teams	Azure Marketplace	Diversity and inclusion
Explore Microsoft products	Microsoft Store Promise	Deals for students and parents	Microsoft 365 Copilot	AppSource	Accessibility
Windows 11 apps	Flexible Payments	Azure for students	Small Business	Visual Studio	Sustainability