All about

Alumni

The Outlaw

A musician by training, renegade computer designer Bill Buxton says true innovation comes through the freedom of play

Bill Buxton's philosophy is that "design," as a discipline, is about much more than deciding what colour a teakettle should be or the shape of a car's headlights. Design, he says, is not about stuff, but about the experience of using it—the object's social context, its value to us and its effect on the world around it. It's a philosophy he's put to work at Xerox's Palo Alto Research Center, at Canadian software leader Alias/Wavefront and with his own Toronto design studio. And it's a philosophy that makes him "one of the world's most influential designers," according to businessweek.com (where he's also a regular columnist on design and innovation). Now he's working on his biggest canvas yet as principal researcher for software giant Microsoft.

A musician by training, Buxton (MSc 1978) gravitated >>
to computer science partly because of his interest in
digital instruments. In 1975, he came to U of T as an
informal "artist-in-residence" in the computer science depart-
ment, experimenting with new ways of making music with
computers. "We were all kind of outlaws within that depart-
ment," Buxton says of his and his colleagues' time there. "We
were deemed to not be doing serious things." But through their
research, Buxton and his peers ended up solving thorny prob-
lems in computer graphics and user-interface design, such as
how to edit musical scores on a computer screen (they were
experimenting with multi-touch surfaces — now made ubiqui-
tous by iPhones — as early as 1984). The experience cemented
Buxton's opinion that most significant innovations typically
happen unintentionally, while pursuing something different.
"That's why we were so successful," he says, "because we were
playing — we weren't consciously trying to do great computer
science, we were just totally captivated by trying to do great
animation and great music. The contributions we made to com-
puter science were unintended consequences. To paraphrase
Oscar Wilde, these things are too important to take seriously.
You have to have the freedom of play to be able to explore
things thoroughly."

That is also why Buxton now focuses as much on corporate
culture as individual products: he wants to create workplaces
where happy accidents, useful failures or sudden inspiration
can mix, leading to innovative ideas. That means studying
intuitive computers, such as tabletop displays that users can
manipulate with their hands or objects, or sophisticated tele-
conferencing systems that allow co-workers in different places
to collaborate as if they were in the same room. — Graham F. Scott