

What Road Ahead for Microsoft and Windows?

Untangling the snarled history of the frequently delayed Windows operating system.

M. Cusumano
Communications of the
ACM, Juli 2006, p. 21

Microsoft again has forced us to think about the past and future of Windows. It announced in March 2006 that the update to XP, now called Windows Vista and more than five years in the making, would again be delayed, this time to early 2007 for the consumer version. This announcement comes after a series of revelations in 2005 in the *Wall Street Journal* and other publications about how the latest Windows project, then called Longhorn, had so many problems that the project collapsed into gridlock.¹ We now know that the chaotic “spaghetti” architecture of Windows and its 50 million or so lines of code was one of the major reasons for this gridlock. Making even small changes in one part of the product led to unpredictable and destabilizing consequences in other parts since most of the components were tied together in

complex and unpredictable ways. Even 4,000 or so software developers and an equivalent number of software testers was not enough to get Longhorn working.

Although this problem was years in the making, last year the Windows executives finally took some action. They resolved to make the code more modular (and thus easier to build, test, and debug) as well as to revamp their engineering and testing processes to reject buggy code automatically, at least to some extent. The Microsoft executives then decided to throw out years of coding work on Longhorn and go back to the Windows 2000/XP server code base, which had many fewer defects in it, and then directed the team to build more modular features around this. They had already removed the most important new set of

these separately. Finally, in August 2005, Microsoft released a beta version of Vista and scheduled the final release for December 2006—allowing itself a little less than a year and a half for final testing.

Once more, however, we learn the Windows team needs more time to get the product out the door. And once again, we hear computer manufacturers, elec-



¹For public accounts of the Longhorn project and the transition to Vista, see Robert A. Guth, “Batling Google, Microsoft Changes How It Builds Software,” *The Wall Street Journal*, 23, 2005, and Dick L. Williams,