

Microsoft could significantly restrict its investment in innovation and still not face a viable alternative to Windows for several years, it can push the emergence of competition even farther into the future by continuing to innovate aggressively. While Microsoft may not be able to stave off all potential paradigm shifts through innovation, it can thwart some and delay others by improving its own products to the greater satisfaction of consumers.

#### **H. Microsoft's Pricing Behavior**

62. Microsoft's actual pricing behavior is consistent with the proposition that the firm enjoys monopoly power in the market for Intel-compatible PC operating systems. The company's decision not to consider the prices of other vendors' Intel-compatible PC operating systems when setting the price of Windows 98, for example, is probative of monopoly power. One would expect a firm in a competitive market to pay much closer attention to the prices charged by other firms in the market. Another indication of monopoly power is the fact that Microsoft raised the price that it charged OEMs for Windows 95, with trivial exceptions, to the same level as the price it charged for Windows 98 just prior to releasing the newer product. In a competitive market, one would expect the price of an older operating system to stay the same or decrease upon the release of a newer, more attractive version. Microsoft, however, was only concerned with inducing OEMs to ship Windows 98 in favor of the older version. It is unlikely that Microsoft would have imposed this price increase if it were genuinely concerned that OEMs might shift their business to another vendor of operating systems or hasten the development of viable alternatives to Windows.

63. Finally, it is indicative of monopoly power that Microsoft felt that it had substantial discretion in setting the price of its Windows 98 upgrade product (the operating

system product it sells to existing users of Windows 95). A Microsoft study from November 1997 reveals that the company could have charged \$49 for an upgrade to Windows 98 — there is no reason to believe that the \$49 price would have been unprofitable — but the study identifies \$89 as the revenue-maximizing price. Microsoft thus opted for the higher price.

64. An aspect of Microsoft's pricing behavior that, while not tending to prove monopoly power, is consistent with it is the fact that the firm charges different OEMs different prices for Windows, depending on the degree to which the individual OEMs comply with Microsoft's wishes. Among the five largest OEMs, Gateway and IBM, which in various ways have resisted Microsoft's efforts to enlist them in its efforts to preserve the applications barrier to entry, pay higher prices than Compaq, Dell, and Hewlett-Packard, which have pursued less contentious relationships with Microsoft.

65. It is not possible with the available data to determine with any level of confidence whether the price that a profit-maximizing firm with monopoly power would charge for Windows 98 comports with the price that Microsoft actually charges. Even if it could be determined that Microsoft charges less than the profit-maximizing monopoly price, though, that would not be probative of a lack of monopoly power, for Microsoft could be charging what seems like a low short-term price in order to maximize its profits in the future for reasons unrelated to underselling any incipient competitors. For instance, Microsoft could be stimulating the growth of the market for Intel-compatible PC operating systems by keeping the price of Windows low today. Given the size and stability of its market share, Microsoft stands to reap almost all of the future rewards if there are yet more consumers of Intel-compatible PC operating systems. By pricing low relative to the short-run profit-maximizing price, thereby focusing on

attracting new users to the Windows platform, Microsoft would also intensify the positive network effects that add to the impenetrability of the applications barrier to entry.

66. Furthermore, Microsoft expends a significant portion of its monopoly power, which could otherwise be spent maximizing price, on imposing burdensome restrictions on its customers — and in inducing them to behave in ways — that augment and prolong that monopoly power. For example, Microsoft attaches to a Windows license conditions that restrict the ability of OEMs to promote software that Microsoft believes could weaken the applications barrier to entry. Microsoft also charges a lower price to OEMs who agree to ensure that all of their Windows machines are powerful enough to run Windows NT for Workstations. To the extent this provision induces OEMs to concentrate their efforts on the development of relatively powerful, expensive PCs, it makes OEMs less likely to pursue simultaneously the opposite path of developing “thin client” systems, which could threaten demand for Microsoft’s Intel-compatible PC operating system products. In addition, Microsoft charges a lower price to OEMs who agree to ship all but a minute fraction of their machines with an operating system pre-installed. While this helps combat piracy, it also makes it less likely that consumers will detect increases in the price of Windows and renders operating systems not pre-installed by OEMs in large numbers even less attractive to consumers. After all, a consumer’s interest in a non-Windows operating system might not outweigh the burdens on system memory and performance associated with supporting two operating systems on a single PC. Other such restrictions and incentives are described below.