



# The Cost of Software Monopoly: How Australian Consumers Lose

**Created:** Steven D'Aprano, Arik Gershoni, Con Zymaris

**Contact:** Con Zymaris

**Phone:** +61 3 9621 2377

**Email:** [conz@cybersource.com.au](mailto:conz@cybersource.com.au)

Last updated: 2005-07-26

*Copyright notice: Cybersource grants you the following rights on this document:*

- 1. You are free to re-distribute it as widely as you wish, as long as it remains intact.*
- 2. You are also free to use within your works, small segments of the document under a fair-use clause.*

## **Disclaimer**

Cybersource is not a legal service nor does it proclaim legal expertise. We are producing the following documentation as a statement of position and opinion on the topic in question.

**The information contained herein represents Cybersource's initial commentary and analysis and has been obtained from sources believed to be reliable. Positions taken are subject to change as more information becomes available and further analysis is undertaken.**

**Cybersource disclaims all warranties as to the accuracy, completeness or adequacy of the information. Cybersource shall have no liability for errors, omissions or inadequacies in the information contained herein or for interpretations thereof.**

## **Legalese**

All trademarks are the property of their respective owners and are duly acknowledged.

## Executive Summary

Over the past decade, the personal computer industry has seen a major reduction in competition in the operating system platform market. A computer operating system platform is the software which computer users learn to operate their computer with, the software that independent software vendors develop applications for and the software that third-party computer hardware developers create compliant hardware for.

Competition in the desktop computer operating system space is practically non-existent, with one platform from a single supplier commanding a very high proportion (over 95%) of the Australian market. This single platform from a sole vendor is Microsoft Windows.

Cybersource believes that a sizeable portion of this market share is due to the fact that over many years, most consumers were never given the option to acquire alternative operating system platforms. Instead, Microsoft Windows was always bundled with most vendors' computer products, whether consumers wanted that bundled product or not.

We have seen that the Australian Competition & Consumer Commission (ACCC) has acted in the best interests of consumers to increase competition in such areas as telecommunications.

Cybersource wants to see similar actions introduced in the computer operating system platform space.

In the software market, as in the telecommunications market, a single, powerful and well-leveraged vendor can cause the reduction of real competition and the corraling of almost all consumers into a single monopolistic platform situation. This causes significant reduction in choice, price competitiveness and innovation. Cybersource calls upon the ACCC to rectify this situation for the benefit of the local Information Technology industry and of all Australian IT consumers.

### Key Points

- 1) It is impossible or extremely difficult for consumers to purchase a desktop PC or laptop from a tier-1 or tier-2 computer manufacturer without also having to purchase an OEM copy of Microsoft Windows operating system platform.
- 2) Cybersource believes that this greatly reduces choice for consumers and competition for the industry. Such a reduction in choice, and consequent reduction in competition, costs the Australian economy hundreds of millions of dollars annually, through paying one vendor needlessly high prices for monopolistic products.
- 3) The computer market is many ways similar to the telecommunications market. When one vendor has over 95% of the market, that vendor should be bound by a universal service obligation to ensure that all consumers can access the content, documents and data which reside on that vendor's platform. Neglecting such an obligation hinders all consumers and third-party developers not using that vendor's platform, further increasing anti-competitive pressures.
- 4) Cybersource believes that such anti-competitive practices should be stopped as soon as possible, through remedies introduced by the ACCC, to secure both a broader competitive base and

increased options for consumers.

- 5) The first remedy that Cybersource seeks from the ACCC is that all tier-1 and tier-2 vendors should be required to offer their desktop and laptop products without an operating system pre-installed, that this choice be presented to consumers as broadly as the products themselves are, and that the price difference between the *with* and *without* operating system options should also be clearly and broadly presented at retail outlets, on vendor marketing literature and vendor websites.
- 6) The second remedy that Cybersource seeks from the ACCC is that Microsoft should be required to offer unfettered and unencumbered access to all major content, document, data and applications formats which could enable interchange and interoperability between users of its platform and users of other alternative platforms.

# Background

## 1. Commodity Hardware: How Competitive Markets Work

The industry segment for personal desktop computers, small-to-medium scale servers and laptops is one which sees extreme levels of competition. This is because there are thousands of component manufacturers (makers of hard disks, CD-ROMs, memory, CPUs and various computer chips) and hundreds of vendors (who compile complete computers from the various components), all vying for the same market space.

During the past decade, computer hardware has seen performance and capacity improvements of between 100-1000% and corresponding price reductions of 90%<sup>1</sup>

In 1994, the price of hardware for an average business desktop computer was around AU\$4,000<sup>2</sup>. A similarly positioned average business desktop computer priced today retails for around \$800 or less.

## 2. How Monopoly Software Works: No Competition, Minimal Price and Feature Improvements

In contrast, Microsoft's Windows and Office software franchises, which have around 95% of the market for desktop operating systems and desktop office productivity suites in Australia<sup>3</sup>, have not exhibited any serious functional feature improvement for most consumers. Most consumers use their desktops, word processors and spreadsheets in much the same way now as they 10 years ago. Yet, over the past decade, the retail price of Microsoft Windows, coupled with the price of Microsoft Office, has doubled.<sup>4</sup> We therefore have a doubling in price for software and a eight-fold reduction in price for hardware. One obviously faces stiff competition whilst the other does not. We can see this even more clearly if we contrast the two scenarios as ratios:

In 1994, the computer hardware constituted 85% of the cost of the whole system. The operating system (Microsoft DOS + Microsoft Windows) and desktop productivity (Microsoft Office) software suite, in turn, constituted a mere 15%.

In 2004, the price of hardware for an average business desktop computer constituted 35% of the cost of the whole system. The operating system (Microsoft Windows) and desktop productivity suite (Microsoft Office) now constitute the great bulk of the cost, at 65%.

Most importantly, in 1994 the actual cost of physical production of the Microsoft Windows and Microsoft Office products was considerably higher than the corresponding products in 2004. In the earlier versions, the product included dozens of floppy disks containing the software for installation and thousands of pages of printed manuals. The current versions include almost no printed manuals and only one or two disks, therefore costing considerably less to produce and ship and thus resulting

---

1 Source for PC pricing. Source: Dell advertisement. Australian Personal Computer Magazine. October 1993.

2 Source for Software Pricing. Source: Harris Computer Superstore advertisement. Australian Personal Computer Magazine. October 1993.

3 <http://www.procompetition.org/litigation/oracle.html>

4 Source for 2004 prices Source: Harris Technology advertisement. Australian Personal Computer Magazine. November 2004.

in even higher margins for Microsoft.

During the same period that has seen the price of the monopoly software double, the cost of supplying that software has fallen considerably. This is yet another sign of a non-competitive market.

### **3. Users Forced to buy Microsoft Windows**

In Australia, the personal computer hardware market is broken down into two main segments. The white-box market, is essentially for low-cost, no-brand-name product, constitutes a minority of the market. The remainder, by far the largest segment of the market, is contested by first- and second-tier brand-name vendors such as IBM, HP/Compaq, Dell, Toshiba, Sony, Acer, NEC, Fujitsu and several others.

Almost all these brand-vendors vendors for almost all of their desktop personal computer and laptop models, give the consumer no choice when purchasing as to whether that consumer also wants to purchase Microsoft's Windows operating system. If the consumer wants the hardware, the consumer must also pay for the software. There is no way for consumers to acquire the personal computer hardware they need without also acquiring a copy of Microsoft Windows, which has an associated Original Equipment Manufacturer licence cost.

### **4. Much Like Telstra, Microsoft Has Universal Service Obligations**

In the telecommunication space, Telstra has certain obligations with respect to providing interoperability with competitors and universal service coverage. This helps both the consumer directly by ensuring that all Australians have access to telephone systems with which they can communicate. It also helps consumers indirectly, by ensuring that Telstra doesn't use its market position and platform leverage to squeeze out competitors and overcharge the consumer.

The computer platform in many ways is similar to the telecommunications platform. When one vendor has over 95% of the market, that vendor has enormous leverage and control over all other vendors and over all consumers. It is therefore important that, as with the telecommunications space, if one vendor has such a large percentage of the market, that vendor must be held to certain crucial responsibilities with respect to the obligation of universal service coverage.

In much the same way that Optus and Vodaphone customers require the ability to receive phone calls from Telstra customers without being forced to purchase a Telstra-specific phone, minority software users need to have the ability to exchange documents and data with Microsoft users without being forced to purchase Microsoft software.

Failure to enforce that universal service obligation severely inconveniences minority software users, stifles competition, and tilts the playing field even further towards the monopoly platform.

### **5. The Cost to Australian Consumers**

The process of hardware commoditisation has been relentless and greatly benefits Microsoft at the expense of all the hardware vendors. Microsoft's platform and application software now costs many times more than the hardware it runs on, leaving Microsoft the monopoly to enjoy its huge financial

and platform leverage advantages alone. As an example, Microsoft makes between 79% and 84% gross margins on its major monopoly franchises of Windows and Office<sup>5</sup>. By comparison, vendors like HP, IBM and Dell make margins of between 4% and 10 % on their main personal computer product lines. Several large vendors run their PC business at a loss, or like IBM, have given up completely in trying to make profit from it.

If we use these figures as an indication of what happens when one industry segment (i.e. platform and productivity software) does encounter insufficient competition, we can estimate what the increased cost is to Australian consumers. According to several sources, Microsoft generates \$1 billion in sales within Australia every year. A very large part of this would come from its two most lucrative products, Windows and Office; however, for sake of argument, we will suggest that only half of that revenue comes from these two flagship products.

If Microsoft's products faced stiff competition, as happens in the PC hardware space, then its margins (about 80%) would not be sustainable. It would instead be seeing average margins closer to the 10% seen by commodity hardware vendors. If we subtract this variation in margins, we would find that Microsoft's revenues, from Australian consumers, reduced by \$200 million dollars every year.<sup>6</sup>

At least \$200 million is therefore the yearly cost of the Microsoft software monopoly to Australian consumers, and equates to the amount of money returned to Australia each and every year if we were able to introduce strong competition into the operating system platform and office productivity suite markets.

## **6. Excuses the Vendors Raise and Why They Are Invalid**

The computer hardware vendors in question, may raise the following objections as to why they would not be able to unbundle the operating system from their computer personal computer desktop and laptop products.

Reason #1: The vendors may claim that by not shipping these products with an operating system, it will make it very difficult to offer users support.

Cybersource's response: Almost all of these vendors ship computer server hardware with no pre-installed operating system at all, yet they have no problems offering support to users for those lines of products.

Reason #2: Local representatives from the vendors in question, may claim that the decision to bundle the Microsoft Windows operating system has been made from headquarters overseas, and that as mere local functionaries, they cannot renege on such a decision.

Cybersource's response: Why should the consumer care where the decision has been made? If such a decision can be shown to be detrimental to Australian consumers and reduces competition in the Australian marketplace or contravenes Australia's competition laws, the ACCC should act.

Reason #3: Vendors may claim that by not forcing the bundling of Microsoft Windows with each and every desktop personal computer or laptop they ship, they will be encouraging piracy, as their

<sup>5</sup> Source for Microsoft product percentages: [http://www.microsoft.com/msft/download/FY02/Q02\\_4\\_financials.xls](http://www.microsoft.com/msft/download/FY02/Q02_4_financials.xls)

<sup>6</sup> See Appendix for calculations.

customers will simply procure illegal copies of that operating system from elsewhere, to install on the unbundled PCs.

Cybersource's response: Pre-supposing what consumers will do with the computer hardware and forcing them to buy Microsoft Windows is anti-competitive in the extreme. We counter by way of a simple analogy. Should we discourage supermarkets from selling plain bread, because shoppers might steal butter from elsewhere? To discourage vendors from selling PCs with no operating system because of the hypothetical loss of revenue to Microsoft goes against the spirit of the free market. It's up to Microsoft to find better anti-piracy methods: it's not the role of the market to force every consumer to purchase Microsoft products that they may not want, in order to protect Microsoft's commercial interests.

Reason #4: The vendors may claim that they bundle Microsoft's Windows with each and every desktop PC or laptop they ship because that is what the market wants.

Cybersource's response: Let's have these vendor offer software-unbundled versions of each and every PC in the space, and we'll see exactly what the market wants. If the consumers wants to purchase Microsoft Windows with a PC, they will be totally free to do so, at the same cost as before. However, if some consumers want to acquire computers *without* Microsoft's Windows, they should now, for the first time, be able to do so.

Reason #5: Microsoft may claim that it invests heavily in Research & Development (R &D), and so has earned such immense.

Cybersource's response: Microsoft's R & D investments have nothing to do with the high pricing that the firm can set. That's due to lack of competition. Additionally, if Microsoft really *had* made considerable breakthrough's in its software technology, then perhaps it could have manufactured an increase in performance and functional capacity which matched that made evident by the hardware vendors – vendors who face severe competition every day of business.

Only strong competition provides the necessary driver which pushes the envelope for new features, improved performance and enhanced facilities for consumers. In a free and fair market, vendors spend on R&D in order to gain a competitive edge. Microsoft obviously needs do no such thing.



# Recommendations

To level this tilted playing field, Cybersource seeks the following from the ACCC.

## 1. Unbundling of Microsoft Windows

Primarily, we request that all tier-1 and tier-2 PC vendors must offer to consumers the option of purchasing each of their PC (desktop & laptop) products without any operating system. Additionally, that the price for the operating system-less version of the product is correspondingly reduced by the cost of that operating system. This last point is important. In order for this remedy to be effective, PC prices *must* be reduced by the equivalent cost of the OEM copy of Microsoft Windows. Additionally, the computer vendors *must* be required to advertise this option along with the price difference in their marketing and sales literature, through resellers or direct sales. Providing an option of a non-Windows install will not be effective unless the vendors widely publicise this option.

## 2. Enforcing Universal Service Obligations

Secondarily, Microsoft, owing to its monopoly status, must be understood to have increased responsibilities to consumers. The ACCC should require that Microsoft make available on a reasonable, non-discriminatory and unencumbered basis, all the core communication protocols, data/document formats and application program interfaces necessary for third parties to create interoperable applications on alternate platforms.

###

## About Cybersource

Cybersource is Australia's leading Linux and open source solutions company. In successful continuous operation since May 1991, it is also one of the world's longest running specialists in this realm.

## Appendix: Calculations

Microsoft admits to \$1 billion revenue in Australia each year, and approximately an 80% profit margin on the two flagship products, Windows and Office.

We wish to calculate the cost saving to Australian consumers if the monopoly margins of these products were reduced to levels more typical in the IT industry, 4% to 10%. For the sake of the exercise, we assume Microsoft is able to sustain profit margins at the upper end of the range, namely 10%.

### Scenario 1:

We assume that **all** of Microsoft's Australia revenue is from the flagship products and their monopoly pricing.

Microsoft's sales revenue is "costs plus 80% margin":

$$\text{cost} \times 1.8 = \$1000 \text{ million}$$

If the profit margin is reduced from 80% to 10%, the predicted sales revenue (all else being equal) will be:

$$\begin{aligned} \text{cost} \times 1.1 &= \$1000/1.8 \times 1.1 \text{ million} \\ &= \$600 \text{ million (in round figures)} \end{aligned}$$

Giving yearly cost savings to Australian consumers of *\$400 million*.

### Scenario 2:

We assume that only **half** of Microsoft's Australia revenue is from the flagship products and their monopoly pricing.

Microsoft's sales revenue for these products is "costs plus 80% margin":

$$\text{cost} \times 1.8 = \$500 \text{ million}$$

The other \$500 million in revenue is assumed to be unchanged.

All else being equal, if the profit margin on these products is reduced from 80% to 10%, the predicted sales revenue will be:

$$\begin{aligned} \text{cost} \times 1.1 &= \$500/1.8 \times 1.1 \text{ million} \\ &= \$300 \text{ million (in round figures)} \end{aligned}$$

Giving yearly cost savings to Australian consumers of **\$200 million**.

Taking a broader perspective, we understand that Australia constitutes approximately 2% of the global (and probably Microsoft's) marketplace. The yearly cost of Microsoft's monopoly is therefore at least \$10 billion.