

Lock and load

MIS Magazine article

Lock and load

By Ian Yates • Published: Wednesday, 6 September 2006

Supplier lock-in can be a source of comfort or a frustrating embarrassment. Here's how to avoid being captives of technology

In a world where executives are increasingly measured on their ability to respond to change, it's reassuring to know some aspects of technology faithfully remain the same.

Read this article online at the MIS magazine site.

Ask almost any information technology professional with more than five years in the game and they will ruefully tell you that no matter what you buy, where you buy it or indeed who makes a given product, sooner or later it will cease to do what you need in the way you need it to be done.

In a process similar to how mass marketing constantly seeks to lure consumers into upgrading to the latest product on offer, anyone who deals with a company's operational functions is persistently confronted with new demands to replace or upgrade proprietary information systems and technology.

Think 12-inch Laserdisc, WordPerfect or TrueType fonts. Sooner or later, obsolescence is a killer, and information technology vendors know only too well how to sweetly disguise the kiss of death with one hand, and salvation through an unavoidable upgrade with the other.

Try to escape by changing to another supplier and the costs can rapidly rise as the full horror of transferring formats, rules and business process becomes so high it is untenable.

Henry Ford, the man who delivered process automation and mass production to modern transport probably best described the dark art of the proprietary lock-in when he said customers could have a Model T in any colour they desired?–?so long as it was black.

And as heavily standardised as spare parts were for their time, they remained by and large available only from authorised agents of the Ford Motor Company.

Today such vendor lock-ins affect almost everything that processes ones and zeros. In a world where both open and proprietary standards hang around about as long as Paris Hilton's latest boyfriend, avoiding lock-in isn't always easy.

Before the pitfalls of vendor lock-in were codified in terms of corporate risk, the process referred to by the charming euphemism brand loyalty. Today such loyalty is geared towards consumables, where you get to choose which fizzy cola drink or which breakfast cereal to add to your addictions. However, there's a fine line between preferred brand and lock-in, even within the consumer space.

Lock and load?–?once the vendor has you in their sights, it's time to start ducking and weaving before the little red dot gets a fix on your forehead.

Prison break

There are various ways to respond, and organisations can take the cue from the New Zealand Ministry of Education. Fed up with a proliferation of non-compatible software that failed to deliver reliable data, in 2004 the ministry compelled software vendors to comply with new standards when supplying schools with management software.

The ministry now requires all vendors to be reviewed and accredited for basic interoperability, data sharing and development standards, before they can supply enterprise management software to schools?–?about 2600 schools in total.

In the first year of the new standard only one vendor passed, while 2005 saw only seven out of 13 make the grade.

According to the MoE, some vendors who were unwilling or unable to comply with the new regime were counselled to leave the market.

Across the Tasman, banks and financial firms appear determined not to be painted into a corner on interoperability

standards.

One open standards exercise involves banks and lenders creating a single language schema for lending processes, from mortgage origination through to final settlement.

Known as LIXI (Lending Industry XML Initiative), the scheme has seen banks and lenders including ANZ, the Commonwealth and Westpac work with credit unions and even mercantile agencies such as Baycorp Advantage.

At the heart of the project is an agreed standard to allow lenders to migrate client and product data between institutions, a crucial feature of today's retail lending landscape.

"Vendors now clamour to be part of this," says the scheme's legal counsel Andrew Perry of legal.consult.

Perry says the scheme has worked well for both large and small institutions because it puts tangible pressure on vendors, especially larger players, to conform to what the industry wants rather than vice versa.

"People want to move to a common interchange standard that was once vendor specific. It pays to get involved in standards bodies where you can have some control over your vendor," says Perry.

In Australia, of all the industries that have both exploited and suffered from supplier lock-in, telecommunications surely rates as the standout. The constructed delays before carriers grudgingly agreed to allow a customer's phone number to be transferred across accounts highlights the hefty financial benefits suppliers can incrementally milk for years.

So keen was the sector to retain its existing customer base it actively derailed a process actually designed to attract new ones, partially because the cost of securing new clients often added up to more than locking the door on the old ones.

However with this largely reactive (albeit successful) strategy came a series of ad hoc purchases of proprietary billing software and systems that have developed into an embarrassing frustration for Telstra, as the telco attempts to change its revenue sources from the fading era of its 80 year old public subscriber trunk network (PSTN) to an internet protocol basis.

In late 2003, two years prior to the arrival of Telstra's latest CEO Sol Trujillo and his technology standardisation consolidation effort dubbed the "one factory" model, the carrier had attempted to cull the great proportion of its 156 siloed billing systems.

At the time, Telstra director of product-ivity Hayden Kelly said the telco had developed proprietary systems that produced 87,000 billing options and 103 pieces of paper a year.

Former Telstra CIO Jeff Smith vowed billing would move to a full open source model to cut costs and make billing code accessible and interoperable within two years.

Neither happened. Two months ago, Telstra announced it would seek to put its billing systems onto the proprietary Amdocs platform, a move estimated to cost around \$100 million.

For Telstra, the true cost of being wedded to an inflexible and increasingly archaic architecture means it is still unable to present or process its services on a single bill or account, a point seized upon by competitors selling on convenience.

So far, there is still no confirmed date for Telstra to have a single, integrated billing system.

Nobody ever got fired for…

In the early days of the ICT industry, vendor lock-in was lauded as long as you picked the right handcuffs. The adage "nobody ever got fired for buying IBM" wasn't an industry insider's joke — ?legions of IT managers did exactly that long before anyone dreamed up the CIO moniker.

When the IT world was viewed through Big Blue coloured glasses, joining the club and sticking with the tried and proven seemed a surefire strategy. Some buyers resisted the single source temptation and chose other vendors that promised a reasonable degree of freedom — ?but then discovered they too were bonded to a vendor that didn't always offer everything they needed. Often the only way out was to return to the vendor they'd been avoiding, a case sometimes involuntarily accelerated by rival vendors merging.

"In the end, you have to have some sort of vendor lock-in, because if you are going to get the job done you have to buy, or obtain somehow, some hardware and software to do it," says Tom Worthington, a visiting fellow of Computer Science at the Australian National University.

“It doesn’t matter how open you are, you are going to need service and support, and the more different sources you are getting products from, the harder the job you are going to have keeping it all working.”

Worthington cautions it is often only when a refresh project or major development comes along that IS managers think about making aspects of their core platforms standardised or open source.

“Once you’ve got a system working, you know you need somebody out there to keep it working for you,” he says. Lock and load? “Happy times ahead for your vendor again.”

While many commercial organisations are prepared to accept the costs of proprietary standards as a normal part of business, government organisations are actively moving to put themselves on a more nimble footing and reduce costs. The trick, it seems, is to be able to both future proof and anticipate the price and scale of change in the initial stages rather than to put off the inevitable.

An added incentive is the whip hand of government audits, which have repeatedly exposed all manner of technological pain

to the gaze of the media. To this degree the federal government in Australia has been issuing plenty of best practice procurement advice in the form of checklists and guides from the Australian Government Information Management Office (AGIMO), whose job is to ensure government technology purchasing responds to policy and not the reverse.

“There is a bit of a Pied Piper syndrome where, if other purchasing officers and CIOs see a large market share going a particular way, and their peers have chosen a particular technology or solution, there’s a certain amount of safety in numbers,” says Rod Irvine, a senior technology adviser to special minister of state Gary Nairn who oversees AGIMO.

Irvine argues a sound strategic defence against getting stuck relies on choosing suppliers who follow agreed interoperability standards.

“Even though some things aren’t interoperable now, some of the equipment might be interoperable down the track,” he says.

Caged birds still sing

These days, most vendors support internet and web standards and usually offer attractive features to enhance and optimise enterprise applications. Yet it is these very enhanced features that are on the frontline of securing customers to a supplier of product.

“As long as you go into it knowing that,” counsels Worthington. “It would be silly not to use some of the features. But if you use the web, then you can mix and match the technologies underneath. You can do remarkable things, translate into other languages; interface to all sorts of other technology … avoiding lock-in has got a lot easier, it is now a business issue.”

Given technology’s role is usually to support the business, managing the degree of lock-in required in order to keep operations running thus becomes a strategic IT decision.

“We have to deal with an environment that’s been built up over the years,” says Rod Irvine. Interoperability demands from buyers can also rein in the gap between supplier spin and what is really available.

The degree of compliance with industry standards, open or otherwise, frequently marks the difference between tangible projects and vapourware.

A case in point is the current push to adopt the open document format, which supporters claim provides freedom from proprietary file formats of Microsoft’s Office suite. While the format has been proven to work, products and applications that support it are still thin on the ground, apart from Sun’s Star Office suite.

AGIMO’s Irvine says one pressing priority for the government is being able to reuse authentication credentials for employees across the government.

“We definitely see issues to be dealt with, such as authentication and identity management. Things need to be worked out, and agreed from a standards point of view,” he says.

Ultimately, if a given product can reach critical mass in the market, what was proprietary can suddenly appear to be a ubiquitous standard.

Lock and load – once again the vendor can sit back and relax, but while your business keeps running smoothly, the CIO can breathe a little easier and deal with other pressing matters.

Additional reporting by Julian Bajkowski