

The Awkward Squad

By Chris Gledhill, Managing Director, PDMS

One of the most interesting things about Information Technology is the way it creates new and often quite radical business models which can seriously inconvenience established business. There are numerous examples of this affecting different sectors of the economy with widely differing outcomes. If you are reading this article on a plane there is a better than fifty percent chance that you purchased your ticket on line, in fact you will have been incentivised to do so by the airline themselves. This is a phenomenon known as 'disintermediation' or, if you don't happen to have purchased an MBA recently, 'cutting out the middle man'. In effect the airline is sharing the travel agents commission with us and everyone (except perhaps the travel agent) is happy.

In retail markets in general, ecommerce has been absorbed into the mainstream, and whilst it has not quite lived up to the more extreme prophesies of the dot com boom, it represents a significant and growing segment of the marketplace. The music industry on the other hand is still locked in an unresolved struggle to work out how to make music downloads pay. At first the reaction of the industry to sites like Napster, the original free music download site (now closed down), was totally hostile. Technologies like MP3 are described by economists as 'disruptive' in that they change the rules of the game with unpredictable results. The impact on the corporate Goliaths of the music industry of new computer based music formats and the global bazaar which is the internet, is far from certain, not least because of the maverick potential of the third player in the game, the artists themselves.

Obviously from a perspective routed firmly in the industry which is responsible for all this disruption, this all seems like good clean fun. However, the IT sector has its own disruptive influences. In the software industry there are a number of established business models all based on the entirely reasonable premise that if you want some software you are going to have to pay for it, by either buying a product that already exists or paying a programmer to write it for you. There are obvious permutations depending on whether you pay the programmer directly or through a contract with a third party and also about the degree to which an off the shelf package needs to be modified by further programming. But one thing is certain, programmers don't live on fresh air (in fact some of the best ones are actually allergic to it) and they don't, in my experience at least, work for nothing.

However, the last statement at least is not entirely true. There is another world in which programmers do work for nothing; it's called 'Open Source' meaning that the source code for programmes is freely available. Programmers all over the world contribute their time to a vast array of open source projects which anyone can exploit however they choose. At first sight this seems to be an economic nonsense, but there is no denying that open source software has become a force to be reckoned with.

In a recent paper on the economics of open source Bruce Perens, a Senior Research Scientist at George Washington University, points out the scale of this phenomenon in the context of Linux, an open source operating system which competes directly with Microsoft Windows and other server operating systems in the following terms.

- The hobby project of a student in his twenties, Linux, takes over enterprise computing.
- IBM, the epitome of conservative business, de-emphasizes its billion-dollar "AIX" operating system in favour of a product developed by a loose coalition of programmers with no financial motive in common, upon whom no corporate directive can be binding, whose leader has no power but the respect of others.
- Microsoft faces its first serious competitor in a decade: programmers who give away their work.

Whilst Perens is clearly a supporter of open source and may be overstating the case a little, there is no doubt that something major is going on in the industry. In his paper Perens goes on over many pages to explain the economic background to the open source model. The essence of the argument is this. The economic purpose of software is primarily as a business enabler rather than an end in itself. Software used in business is either 'differentiating' in that it makes your business more desirable to your customer than your competitor's business; or 'non-differentiating' which means that there is no disadvantage in your competitors having access to the same systems. Open source development is a collaborative effort in which otherwise competing businesses can benefit from sharing resources. Therefore, open source developments can compete with mass market products for the non-differentiating aspects of business computing, whilst the all important process of creating business differentiators is likely to remain proprietary for the foreseeable future.