

Developing the Linux Business Case for Financial Services

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Ladies and Gentlemen

11th September was a cataclysmic event in world history

Talk of war and warnings from the American and British military machine have already affected global markets.

War is a catalyst and accelerator of social and business change. The recent dramatic change in market capitalisation of the giant British Airways versus the flexible, low cost, budget operators like Ryanair might have otherwise taken a few years, but 11th September has made it happen now. Ryanair's current capitalisation, at over £2 billion, exceeds British Airways' at £1.7 billion. This is because Ryan Air focuses on operational cost reduction through fast turnaround times and eEnabling the booking, pricing and customer service processes. Swissair, that famous name synonymous with reliability and quality, is now bankrupt. Interestingly it is Crossair, its own low cost subsidiary that will now end up cherry-picking the profitable routes. I find this staggering and the implications are significant.

By the way, the Ryanair web site is running Apache on Red Hat Linux and British Airways is running Netscape Enterprise on Sun Solaris. And according to Netcraft's latest survey of over 32 Million sites, 58% of top web servers across all domains are running Apache, the well known Open Source application. In comparison, Microsoft IIS is now under half of that market share at 26%.

The dramatic success of these low-cost eBusiness operators versus the dinosaurs of the corporate world is an urgent warning to multi-nationals, banks and global insurance companies that unless they radically change and take out cost from their businesses, then they could easily suffer the same fate as the airlines via tectonic shifts in customer preference.

Before I go into the heart of this discussion, let me point out that this talk is much more from the strategic angle of Linux and less so from the technical side. The CEOs and CFOs who we work with are much more keen to listen to the business rationale for Linux as opposed to the technical benchmarks that prove the operating systems maturity.

Open Source brought success to mi2g

mi2g stumbled into security issues in a serious way in mid 1997 when our vertical communities on the web, called lounges, got hacked by a disgruntled anti-Microsoft group. Our lawlounge was running a debate on Bill Gates. In those days, lawlounge ran off Microsoft IIS.

At any rate some clever clogs got upset with positive comments about Mr Gates made on the bulletin board of the site and they ended up hacking into the system. The more we tried to protect the IIS application, the more they came back and brought it down over and over again. This led to the migration to Linux on Apache at mi2g in late 1997.

Since then we have become more adept at understanding Linux as time has gone by. Over the last four years, the lounges have attracted over 9 million visitors and have demonstrated high reliability during that period. We became evangelists of Linux overnight in mid-1998 and have been promoting Open Source, where it succeeds as best of breed, since then.

Security through Linux

From this initial interest in security, mi2g worked closely with Lloyd's of London brokers and syndicates in developing eRisk Management insurance products. In January 1999, we published a memorandum for the insurance market entitled, "Cyber warfare: The threat to business, government and financial markets". Of course there was some scepticism towards what we predicted and within two months, the Serbia-NATO conflict validated the arguments. Over 100 businesses in NATO member countries were hacked online by the Serbia sympathetic brigade. Along came a misdirected NATO bomb on the Chinese embassy in Belgrade and all hell broke loose. The White House web site was attacked and defaced by the "Hong Kong Danger Duo" and "Global Hell" despite an auto-refresh system.

This, in retrospect, was a turning point for mi2g and it catapulted us into the international arena of working with large financial institutions in electronic attack mitigation systems, mission critical applications and risk management solutions. Of course, many of the honey pots and hardened firewall kernels that we install are Linux based.

We have developed mi2g's success around the provision of bespoke security architecture for a range of clients in financial services, here in London, Europe and North America, where we now generate over 70% of our turnover.

Today, mi2g has grown into an eBusiness provider and one of our partners is Fairfax Financial Holdings, a Toronto based global insurer with assets of over C\$31 Billion. We are establishing a joint venture called MFX, which will deliver eBusiness solutions both for their companies and for other companies in financial services. The work we're doing for them ranges from OCIF and CRM through to highly secure portals, intranets and extranets. We're now adding managed security services. Post 11th September, a managed security strategy is now a mandatory issue for large companies and is an

integral part of their Risk management strategy. You'll not be surprised that Open Source is intended to be a cornerstone of the network and architecture.

eBusiness can help companies to cut costs

The challenge for a group like ours is to help financial services companies to develop their competitive edge and to make profits. As companies gravitate towards conservative solutions to profitability problems, nobody is going to make an eBusiness investment based on a leap of faith. Our answer remains the same. Use eBusiness to cut operating costs and increase productivity and now deploy Linux as a cost efficient solution for implementing enterprise wide eBusiness.

Insurance companies, driven by the need to take cost out, are responding to the challenge and making major eBusiness investments. Zurich Financial Services, ING and Allstate Insurance are to invest a total of \$4 billion in eBusiness over the next three years.

Lars Petersson, CEO of Skandia, is budgeting to save 15% per annum through eBusiness. Swiss Re says that eBusiness will help it achieve per annum cost savings of \$103 million by eliminating or outsourcing chunks of middle and back-office process costs. Dr Dill, CEO of Axa Colonia, is using Customer Relationship Management - CRM - to cut costs by delivering more efficient claims handling and policy issuance.

Intelligent Deployment

Unfortunately many IT departments suffer from the "not invented here" syndrome and are bombarded by product touting IT salesmen who offer salvation for complex legacy problems through a first-aid silver bullet solution. IT is only 10% of the issue, 90% is people related.

A well-known example is a large life insurance company - no names mentioned - that has developed a brilliant front-end using proprietary software. However this company has ten different products online and they all have their own back-end legacy databases as well as their own middleware engines. This suggests a very fragmented, quick and dirty approach towards getting a proof of concept.

In their case, the cost of each middleware engine with its database is about \$3 Million when it comes to paying for the software license, bespoking it and deploying it on servers. Ten times \$3 million is \$30 Million. However, if a more intelligent approach were to be taken at this insurance company it would mean that there could be a unified middleware engine built for about \$6 Million and the cost of a unified datamart would be another \$9 Million. This suggests that as much as unifying the ten disparate eCommerce projects could save \$15 Million.

Linus Torvalds, Jerry Skaggs and John Chambers

The revolutionary open source Linux operating system developed by Linus Torvalds at the Helsinki University 10 years ago now represents one of the fastest growing threats to Microsoft Windows and Sun Solaris.

When the New York Stock Exchange announced last month that cost and reliability factors had prompted them to change their Sun Solaris system to Linux operated IBM servers, Sun's shares dipped 5% and they had to call a mid quarter conference call to re-assure investors.

Jerry Skaggs, Head of Information Services at UPS, says "We see a big future for Linux. The next step is to use Linux to simplify consolidation onto fewer mainframe systems. This would drop maintenance, support and staffing costs and reduce total cost of ownership."

Cisco's Chairman John Chambers recently likened the change in the markets to a 100-year flood. mi2g's view of the future is that Linux open source is likely to more closely resemble a tidal wave - a 'Tsunami'.

The challenge for Open Source is two fold:

First, for widespread use in financial services operating systems, there has to be a High Availability solution. We're relying on our friends around this table to provide this.

Second, convincing CEOs that Open Source should be on their agenda of strategic solutions to win long-term competitive advantage. This is the space in which mi2g operates.

What is mi2g doing to promote Open Source?

We are of course promoting Open Source solutions to our financial services partners, and we will include it in all our communications.

For instance, on 17th October, we will be hosting one of our closed discussions on the Chairman's floor at Lloyd's on the subject of "The Coming Linux Revolution". The guests will include senior bankers, insurers, lawyers and financiers.

Following that, on 22nd October, Andrew Pinder, the e-Envoy, will be introducing me as the speaker at the Real Time Club in Whitehall, to provide an intelligence briefing on eSecurity following the 11th September tragedy. Open Source will feature strongly.

Both these events are conducted under the Chatham House Rule, which enables everyone at board level to be frank and open about their strategic worries and problems.

10 Reasons for large businesses to deploy enterprise wide Open Source

1. **To save license fee costs.** Also there has been a proven drop in total cost of ownership including maintenance, support and staffing costs via Open Source.
2. **To reduce business risk.** An open source strategy reduces commercial dependency on a closed source single supplier who may adversely affect the bottom line with new license fee demands from time to time.
3. **Managing eRisk** via a correctly implemented open source model allows patches to be developed in-house or through a wider community
4. **Reliability** - The Linux operating system is highly reliable and stable
5. **Range of applications** from big players – IBM, Oracle, BEA Systems, SAP and Siebel - are now available on Linux
6. **Distributed High Performance Computing** for Data mining and Customer Profiling can be deployed on Linux virtual farms on a mainframe or on PCs
7. **Biodiversity** - When the enterprise wide commitment is to only one O/S there is huge exposure to a specific security threat. Witness “I love you”, Nimda, Code Red etc. mi2g recommends differentiating the server O/S from the client O/S.
8. **Recruitment** - More and more universities are deploying Linux as opposed to proprietary operating systems; so the new generation of employee hires are going to be Linux literate.
9. **Listen** - Demonstrate to your staff that the management does actually listen to what their smart technical people have been telling them for years!
10. **Be ahead of the game** - Gain competitive advantage and improve shareholder value.

For now, I hope that we have provided you with some useful insights into what businesses are looking for in Open Source solutions. We will be happy to discuss how businesses are likely to react to your enterprise wide Open Source proposals.