

WHITE PAPER

Cloud vs. On-Premise: Is there a Middle Ground?

*Building Multi-Channel Business Applications
without Re-Coding*

Magic Software

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Developing 'Lean and Mean' Business via Cloud

According to most analysts, the key to business survival in today's economic environment is to adopt a 'lean and mean' approach.ⁱ In practical IT terms this means adopting technology platforms that are low on entry price, are easy to continuously maintain and at the same time enable a wide-as-possible market reach.

Over the past year, more and more companies have recognized in Cloud platforms the technological solution to the dual challenges of lowering costs while enabling growth.

Enterprises of all shapes and sizes are today more conscious of IT wastage and more wary of the dangers of pre-investing in software. The power of Cloud-based applications is that you can now effectively create a rich desktop application experience and deliver this over the internet – making your application accessible from anywhere, using very minimal IT infrastructure.

The Cloud Advantage: 'Consume' Apps without 'Acquiring' Them

A Cloud offering requires first and foremost the ability to *build and deploy Rich Internet Applications (RIA)*ⁱⁱ. RIA technology combines the best parts of on-premise Client-Server applications and the Web into a flexible and future-proof design. The end result allows users to benefit from powerful business-oriented applications that are not restricted to the office desktop.

Cloud applications enables enterprises to improve productivity and customer service, as workers can access key back-office data from laptops and in particular, *mobile devices*ⁱⁱⁱ such as the latest Windows Mobile, iPhone and Blackberry, while in the field, in front of the customer, at home or on the move.

Any organization looking to save on the costs of deploying a traditional enterprise application can now adopt a leaner, ready-to-consume application model through the Cloud.

For a relatively small fee ISV's can provide their customers with RIA software in the form of a scalable service. Otherwise known as SaaS (Software-as-a-Service), this business model provides internet-password access to Enterprise-grade 'elastic' applications with all the power of their desktop rivals, but without the infrastructure hassle.

Cloud SaaS applications enable software vendors to reduce the entry barriers to their application offerings – enabling users to 'consume' software functionality on a subscription basis that can be entered and exited with ease.

More importantly it puts an end to expensive software and hardware 'acquisition' that requires significant pre-investment and ongoing maintenance.

The SaaS model doesn't require the acquisition or maintenance of servers, networks, or security. Customers using a SaaS solution consume only the software they need, similar to the 'just in time' logistics model. And this means far lower costs for the same, if not superior, performance. And the proof is in the pudding, with Gartner now predicting the worldwide SaaS market to more than double, with SaaS revenues set to reach \$14.8 billion in 2012.^{iv}

The Zero Sum Dilemma

However, while on-demand or Cloud deployments such as SaaS are certainly more attractive from the customers' angle, the elimination of the traditional on-premise perpetual software license-model makes the issue of cash-flow and profitability more problematic for organizations looking to stay alive in today's business climate.

Even if software vendors could afford to develop and deploy a solid SaaS-based offering, they'd have to wait a considerable time before they start seeing the sort of revenues they've been previously used to. A look at the math will show that a typical enterprise software SaaS seat would cost approximately \$200 per month whereas the same seat on a perpetual basis could sell for anything around \$2,000.

The SaaS model simply doesn't compare. A software vendor would have to wait almost two years to make the same revenue that a single on-premise sale would generate.

Simply put, most vendors and ISV's cannot afford to give up their current on-premise customer base which represents the lion's share of their revenues. It is also worth remembering that most SaaS offerings are one size fits all, so industry or business-specific customization and extras are limited. And not all enterprises feel comfortable being dependent on the provider to ensure the application's functionality, consistency of service and security. So from some perspectives at least, the on-premise perpetual license model remains an attractive option.

Despite the obvious cost and flexibility advantages of Cloud and SaaS, the many legitimate concerns including reduced short-term revenue, lack of customization and security are holding back both software developers and their clients from fully embracing the Cloud.

Enterprises, software vendors and ISV's are thus placed in a zero-sum dilemma. They understand the advantages of Cloud and they want to use it. But at the same time they don't want to completely throw away their on-premise

Client/Server model that brings in good business and supports an established customer base.

Maintaining 2 Codebases is Risky and Expensive

The obvious solution is to maintain both deployment models at the same time – to keep the Client-Server model running while building a Cloud/SaaS application to expand the company's catchment area. But there again the cost of developing, running and maintaining two separate applications and code-bases makes the whole exercise risky and further postpones ROI.

Other options could be to re-write or re-develop the solution, either as a Platform-as-a-Service (PaaS) offering, or by moving to an environment such as Windows Azure. But in either case software vendors are still placed in a zero-sum dilemma were they are forced to deploy two completely separate products. And with the inherent maintenance costs of both, they won't be regaining profitability in a hurry.

Even in a PaaS scenario, that uses a declarative metadata driven platform with good productivity and cost-effectiveness, they would still have to separately support an on-premise version of their product for their current customer/revenue base. In either case still not definitively cost-worthy.

One Application – Multiple Deployment Models

Offering a possible way out of the dilemma is the new breed of hybrid RIA application platforms such as Magic Software's uniPaaS.

When writing a new business application, most software houses or developers don't exactly know which channel is going to prove the most popular. It therefore makes sense to develop a single application using one platform, and then distribute it to a number of different deployment channels.

uniPaaS is a metadata-driven application platform that, while providing the same productivity and cost-effectiveness of PaaS offerings, also gives owners a 'hybrid' ability to develop, run and maintain a combination of deployment channels (desktop, client/server, HTML Web Applications and Web 2.0 RIA) from a single development effort and codebase.

ISV's have the option of building and running a Cloud application offering in parallel with their original Client-Server on-premise deployment model - while only paying for a single development and maintenance effort. With such a model the application can be repurposed at any time for a different channel without the need to re-code the application entirely from scratch.

Using this approach, organizations can take full advantage of the Cloud's economies of scale and expand their market, while maintaining their existing bread-and-butter business from their on-premise Client-Server application.

Mix and Match – The Hybrid Cloud Option

For many companies, but particularly among large enterprises, there are moves to embrace the Cloud, based on the advantages of paying per month for services that are quick to deploy and managed for them.

However, business executives remain reluctant to storing their mission-sensitive information, such as financial or strategic planning data available on the so-called 'public Cloud'.

Indeed, analysts such as Gartner are already predicting that IT organizations will spend more money on private cloud computing investments than on public Cloud providers in future.^v As opposed to the public Cloud which delivers scalable applications to external customers, private Cloud delivers IT functionality to internal customers only, enabling the organization to better secure and provide restricted access to sensitive information.

Using an application platform with the ability to deploy in multiple channels means that clients can now dictate which information never leaves the company's internal network, which information can be accessed by registered users – and which information is deemed acceptable to be released on the public Cloud.

The Power of Choice

As the Cloud continues to develop, companies will increasingly have the means to take on the giants of the industry and provide more value to their business clients.

For enterprises and software vendors, one way to take control is to consider hybrid application platforms such as uniPaaS that allow developers to build an application once and deliver it across a wide spectrum of channels, including Client/Server, RIA, SaaS and mobile handsets.

Such a strategy allows companies to launch confidently into the new Cloud market, while still maintaining the customers and revenue streams they already have from their existing on-premise Client/Server model.

Now is an exciting time as the Cloud develops both on the public and private level to combine flexibility with improved security. For companies of all sizes looking to ensure competitiveness in today's market economy, the results should be liberating; freeing them from the straight choice between fully owning applications and having them completely hosted in the Cloud.

About the uniPaaS Application Platform

uniPaaS is a metadata driven, hybrid application platform enabling organizations to build and deploy advanced business applications.

uniPaaS is a comprehensive platform, featuring an end-to-end development paradigm that provides all parts of the application development and deployment process.

uniPaaS offers customers the power to choose how they deploy their applications, whether Client/Server or web; on-premise or on-demand; in the cloud or behind the corporate firewall; software or SaaS; mobile, global or local. uniPaaS also complies with event-driven and service oriented architectural principles.

uniPaaS provides technology transparency so developers can focus on the business-side functionality of their application rather than technological requirements and processes.

uniPaaS is interoperable with .NET and Java technologies. Business applications created with uniPaaS RIA are browser-free, 3-tier, with no use of script or middleware, multi-platform, and available via mobile devices.

About the iBOLT Business Integration Suite

iBOLT is a metadata platform for business and process integration. It enables organizations to synchronize data within diverse applications and provides enhanced workflows, automation of manual processes, and a real-time view of business activity.

iBOLT simplifies the design and integration process by separating business logic from integration technology. iBOLT makes changes to prototype business models without affecting actual business or technical layers.

iBOLT features user-friendly, code-free tools such as wizards, drag-and-drop options and tables, creating straightforward connections with enterprise applications deployed on any hardware, operating system, or database.

iBOLT Special Editions

iBOLT integrates a wide range of IT business applications including [SAP Business One](#), [SAP R/3](#), [Salesforce.com](#), [Oracle JD Edwards](#), [Lotus Notes](#), [Microsoft CRM Dynamics](#), [IBM i \(AS/400\)](#), [HL7 applications](#) and Google Apps.

About Magic Software

[Magic Software Enterprises](#) (NASDAQ: MGIC) is a global provider of application platforms and business integration solutions. With over 25 years of experience, our technology gives our partners and customers the power to leverage existing IT resources, enhance business agility, and focus on core business priorities.

Magic Software has thousands of successful customer installations worldwide and a global network of ISVs, system integrators, value added distributors and resellers, and consulting and OEM partners. Our technological approach, product roadmap and corporate strategy are recognized by the leading industry analysts. Magic Software has 13 offices worldwide, a presence in over 50 countries, and partner alliances with global IT leaders including SAP AG, Salesforce.com, IBM and Oracle.

For more information about Magic Software and its products and services, visit www.magicsoftware.com, and for more about our industry related news, business issues and trends, read the [Magic Software Blog](#).

ⁱ http://www.forrester.com/rb/Research/top_five_changes_for_application_development_in/q/id/55646/t/2

ⁱⁱ White Paper: [‘Overcoming RIA Development and Deployment Challenges’](#)

ⁱⁱⁱ White Paper: [‘6 Tips for Building Mobile Enterprise Applications in 2010’](#)

^{iv} <http://www.cmswire.com/cms/enterprise-cms/gartner-saas-is-hot-revenue-will-keep-rising-003397.php>

^v <http://itmanagement.earthweb.com/netsys/article.php/3851236/Private-Trumps-Public-Clouds-for-IT.htm>