

opinion piece

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# Application Virtualisation Comes of Age



IT departments today are tasked to trim costs while increasing operational agility, delivering superior service, and maintaining end-user satisfaction. Application virtualisation is increasingly being recognised as a conduit to achieving these goals. By converting applications into virtual services that are managed and hosted centrally but run on demand locally, application virtualisation mitigates the complexity and IT effort involved in deploying, updating, and managing applications.

Applications are arguably the foundation of any business' IT services. Among the key functions of the IT team are ensuring that users have the applications they need to perform their jobs and guaranteeing that those applications perform reliably. Adding to the pressure is the fact that users and businesses are driving a change towards more flexible working styles, which means delivering applications in a manner different from that to which many IT departments are accustomed.

Businesses need IT teams to afford them the flexibility to react to market changes swiftly. It follows, therefore, that if IT doesn't have a thorough grasp of the application estate and whether it's geared to support the latest technologies and working styles, significant business risk will be created. Bottlenecks and delays will quickly ensue. Costs will spiral as projects are stalled by the application workstream.

### Complexity mounts

Application-related complexity is heightened even further if we consider the attention that needs to be given to the application estate when the time comes for operating system upgrades. Many organisations haven't undertaken a large-scale operating system upgrade since Microsoft® Windows XP, as many opted out of Microsoft® Windows Vista altogether. Today, the reign of Microsoft® Windows XP is fast coming to an end and its April 2014 end-of-support deadline is looming large. Much has changed since the launch of Windows XP and today, there are many different ways to deliver applications to users, so a host of factors need to be considered.

The Client Virtualisation Imperative, 2011, a commissioned study conducted by Forrester Consulting on behalf of Dimension Data, reveals that 43% of organisations have commenced their Microsoft® Windows 7 roll-out, with a further 33% in various stages of planning and piloting their upgrade path.

Upgrading a business' operating system is no mean feat. Often, legacy applications that are critical to business operations are often unable to migrate to a new operating system. Thus, migration typically requires a large-scale application rationalisation effort. All existing applications in use within the organisation must be inventoried, tested for compatibility and, if found not compatible, either be removed, or – if they're deemed critical to business operations – redeveloped, often at considerable cost.

The Forrester study confirms that application bloat is rife. Most organisations support in excess of 300 applications enterprise-wide.

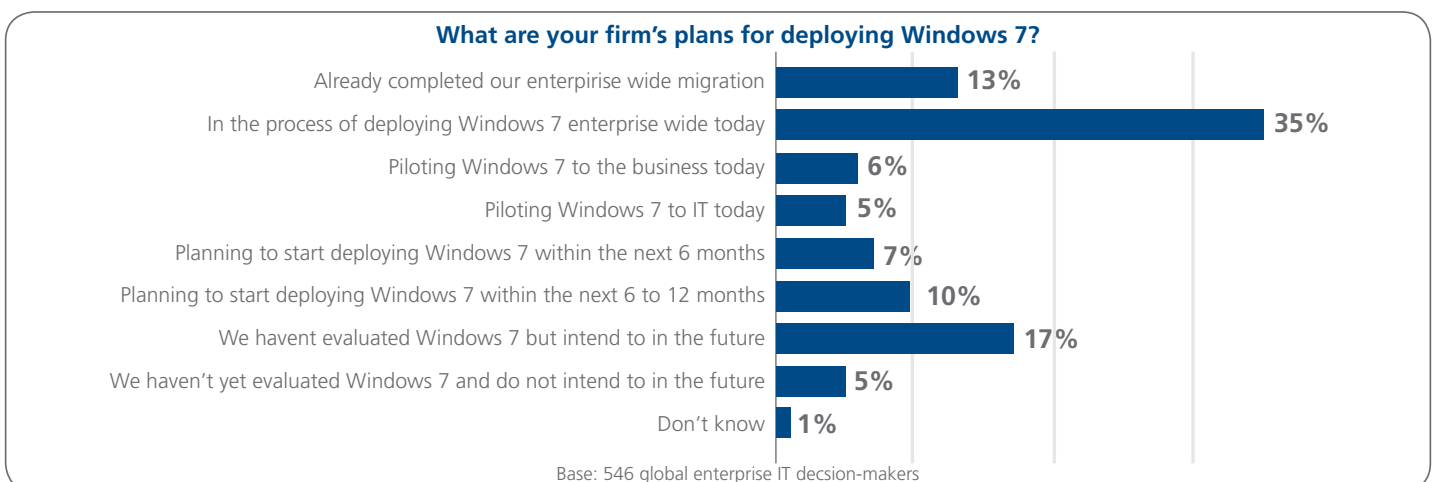
According to Stuart James, Dimension Data's End User Computing Lead in the United Kingdom, "Ascertaining what applications you actually have and establishing whether they will run on Windows 7 is a major undertaking. This exercise is also a little like an iceberg: very difficult to gauge and quantify at the outset." Many organisations, it seems, have underestimated the magnitude of the task and are electing to outsource the task of inventorying, testing, remediating, deploying and supporting, applications to third parties.

It's also important to consider the impact a new operating system has on custom-developed applications in addition to off-the-shelf or third-party applications and whether their hardware and device drivers are compatible. Oftentimes, IT teams overlook web-based applications when evaluating their readiness for an operating system migration and frequently underestimate web browsers as a barrier to upgrading. In fact, the Forrester study found that approximately 55% of locally installed third-party applications, 73% of locally installed custom-developed applications, and 74% of web applications will require some remediation to run on a new operating system and web browsers.

### How application virtualisation can help

These challenges are driving organisations to move away from the traditional model of the monolithic desktop and applications in search of a fundamentally better way to operate their end-user environments. "Our advice to clients is to use their Windows 7 migration as an opportunity to review the

**Figure 1: Windows 7 roll-outs are well underway**



overall desktop and application delivery strategy, taking into account all the recent advancements in the virtualisation domain," says James. "But start early – and don't consider applications as an afterthought".

He explains that today, application virtualisation is increasingly being eyed as a means to help support the transition to an optimised desktop, with the ability to deliver applications in many different ways. The results of the survey support this view, indicating that organisations across all industries and geographies are prioritising their investment in application virtualisation. Overall, 40% of organisations view investing in and/or implementing application virtualisation as a 'high priority', while 12% deem this an area of 'critical priority' over the next 12 to 24 months.

"With the traditional desktop, the applications, operating system and user data are all tied to a specific piece of hardware. Virtualisation breaks the bonds between these elements into isolated layers, enabling IT administrators to change, update and deploy each component independently for greater business agility and improved response time," adds James.

## Application management made easy

Using application virtualisation not only helps with application conflicts but it greatly reduces the time you spend on application management post-migration, including application updating and deployment. Updating traditionally installed applications requires extensive testing and also lengthy roll-outs. With virtualisation, an application

can be swiftly updated and introduced to the infrastructure. Then, the next time a user opens the application the updated version will be automatically brought to the machine on demand – no waiting for installation, no reboots.

Additionally, when virtual applications are no longer needed, they can be easily removed, as they were never installed on the operating system. Depending on the deployment option, procedures to remove virtual applications will be different, but the end result is an operating system without any lingering files or settings from the application that's been removed.

The advantages of application virtualisation extend further still. As James explains, "Being able to isolate applications from one another and from the underlying operating system affords you a great deal of flexibility in how that application is delivered. No longer does an application need to be installed on a system. This means applications can move easily with your users across the range of devices that they use. It's all about delivering the right application, to the right user in the right way for the device they're using. Today, many employees perform business tasks using a variety of devices that may or may not be owned by the organisation. Isolating applications means they can be delivered to users securely, irrespective of the device."

## Swift returns

In spite of the hype around virtualisation, James believes many of the currently available desktop virtualisation technologies are only suitable for certain types of businesses or users. Not so with application

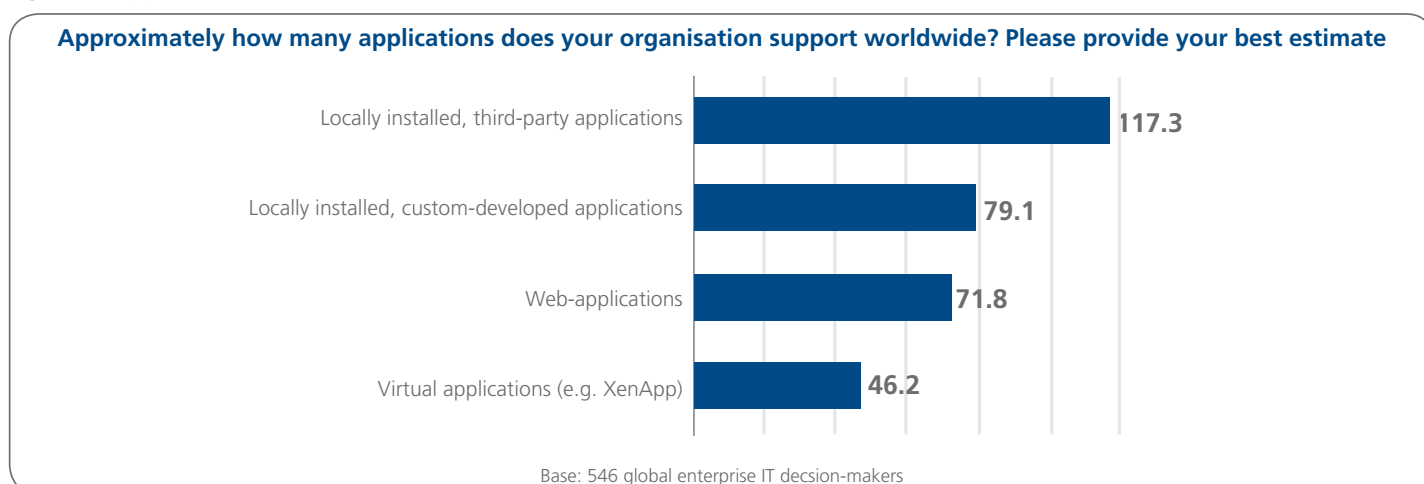
virtualisation. "Application virtualisation stands out as one of those technologies from which almost any organisation can benefit, immediately. The tools are here and they are maturing fast."

Businesses that embrace application virtualisation will put themselves on track to granting employees the flexibility to work anytime, anywhere, on a range of devices. They'll also streamline, simplify application provisioning and management and speed up their transition to a next generation desktop. All the signs indicate that application virtualisation is truly coming of age.

## About the The Client Virtualisation Imperative Report, 2011:

The Client Virtualisation Imperative, 2011, is a commissioned study conducted by Forrester Consulting on behalf of Dimension Data. In this study, Forrester conducted an online survey of 546 organisations, across all industries in Australia, Belgium and Luxembourg, Brazil, China, Czech Republic, Germany, Hong Kong, India, Kenya, Netherlands, New Zealand, Singapore, South Africa, the United Kingdom and the United States to evaluate the adoption of desktop and application virtualisation and the desktop transformation journey on which organisations are embarking. Survey participants included decision-makers in managerial roles and above for enterprise companies (1,000+ employees in developed economies and 500+ employees in developing economies). The study commenced in July 2011 and was completed in August 2011.

**Figure 2: Application bloat if rife**



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