

# Hype **versus** reality: technology today

*Advances in IT are now so fast and potentially so transformational that it's getting difficult to differentiate between hype and reality. Brian Tingham seeks direction*

**I**T is a moving target – it always has been and, in a sense, that's part of its excitement. But practitioners I speak to agree that the little stability they used to enjoy in what was, after all, an entirely technical world, is accelerating away from them. Web 2.0, semantic web, SOA (service orientated architecture), SaaS (software as a service), virtualisation, BPM (business process management): buzz phrases, but what do they mean? How should we be planning our IT investments in light of them?

Earlier this year, analyst Butler Group released its key technology predictions for 2007. Among its top tips: MOSS (Microsoft Office SharePoint Server 2007) will be a winner; IT vendors will popularise SOA and ESB (enterprise service bus), but users will remain unmoved; and virtualisation of servers, storage, networks and clients will be critical to improving flexibility and utilisation.

Other predictions: BPM, including legacy system process discovery, will become mainstream; BI (business intelligence) will move up a gear to corporate performance dashboards; and fixed/mobile communications convergence will happen. But what's behind all the words? I spoke to thought leaders and challenged them to be candid about reality, hype and the implications for users wondering what's going to hit them next.

First Web 2.0, and Sun Microsystems' James Gosling, laid-back father of Java, who says: "People started talking about Web 2.0 a couple of years ago and I felt like a complete idiot because I didn't know what it was. But there's no definition... If you want Web 2.0 to mean ubiquitous computing, the network is the computer – then that's the road Sun has been on for a very long time.

"I think Web 2.0 is a lifestyle thing, a community in which everyone is an active participant." He sees its significance, if any, as support for democratisation of technology – giving the example of users integrating web services to provide 'mash-ups' (application hybrids) on the fly. But he adds: "I think Web 2.0 should be deleted from the marketing vocabulary of the planet."

Meantime, web services firm Immediacy's marketing director Matt Goode describes Web 2.0 as "a line in the sand", while brother John (COO) sees it as "democratisation that turns communications on its head". Matt's take: "With our users moving towards b2b with their customers, it's important, because marketing becomes

less valuable. Peer-to-peer computing, like Amazon's customer feedback, will take over, so organisations need to wake up to this and the potential impact on their brands. That's a strategic factor for business."

John's take: "One of my favourite software vendors is Vtiger – favourite in that it's an open source organisation that attracts people and sells its services by using a simple Wiki [server software that allows browsers to create and edit web page content] interface for users to self-document installation and operations experiences, for example." His point: it shows the importance of getting the product right and easing user interaction. "To me, Web 2.0 means there are big and expensive questions for organisations over how they manage their brands and marketing."

## Hot source

Talking of open source, though, watch out for Openbravo, a Spanish organisation now building airtime with its web-based, open source ERP software for SMEs. Josep Mitja, COO, says that since the company closed a \$6.4m deal with a venture capitalist last year, it has been building a network of training and implementation partners. "Currently, we're getting 20,000 downloads per month," he says. This could take off: he rates the software as "currently one step behind Microsoft Navision."

Moving on, Rohit Bhargava, director of worldwide technology strategy for manufacturing at Microsoft, believes other issues are more important. His hot buttons: consolidation and standardisation; security, access and manageability with services such as Active Directory; real-time collaboration through MOSS; and integration via web services and XML.

"Active Directory is becoming important because people and companies need to collaborate, which means providing information across multiple devices, sites and organisations," he explains. "So they need the right protection for IP, as well as rights and policies governance." He gives the example of designers using CAD and PLM (product lifecycle management), interacting with others wherever they are. "Allowing events to flow across functional silos, using these services, reduces costs and response times."

But while enabling that secure data flow using Active Directory and its associated technologies is reality, SOA

in this context is, for him, hovering on the hype/reality divide. "The value is a bit fuzzy and no-one is going to do SOA for the sake of it." He doesn't mean there is no value: "SOA can make information from different data sources available to users and other applications, so the value then is democratised data – meaning that stakeholders that would not normally have access, for example, to SAP, can work with its data," he says.

What about MOSS? "Again, today we have these silos between product design, manufacturing engineering, production operations, supply chain etc. SharePoint will facilitate collaboration – extracting data from shopfloor systems, supplier KPIs, product performance and so on, and bringing it to users' dashboards, irrespective of platform and technology. So, for example, it will enable designers to see the impact of their work on suppliers, production and sales."

And Bhargava sees Infopath forms, which capture unstructured data and submit it to SharePoint, extending that visibility – while embedded workflow enables even more business process automation. Interestingly, he also believes there's a lot more life in good old Excel under SharePoint: "Excel Services mean universal access, versioning and audit trails," he explains.

Indeed, for Lorenzo Pengo, Microsoft's EMEA managing director for manufacturing industry, MOSS' all-round ability to break down information silos makes it this year's killer application. "Connecting information, people, departments and business processes brings new value to manufacturers. The portal, with its multiple images of an application, BPM, search, content management and communication, is changing industry. It's what we call 'people-ready business'."

One more point from Microsoft concerns the age-old challenge of plant-to-business links. "Web services and XML make this much easier by getting away from proprietary solutions," says Bhargava, "and at a time when the pressure is on for real-time integration – not only for keeping actuals in sync with changing plans, but for providing visibility of outsourced production." He sees Microsoft's standards work, such as that with the OPC Foundation, as another driver here, accelerating uptake of its .Net framework, now at v3.0, and technologies like Windows Presentation, Workflow and Communication Foundation. "The whole web services stack is being leveraged to realise OPC Unified Architecture," he says.

Moving on, what about virtualisation?

Reza Malekzadeh, marketing director at VMware, insists that running multiple applications and operating systems on a single unmodified machine – with session isolation and encapsulation – is very much for real. "Some customers are consolidating servers by re-using their X86 machines, moving from 30% to 80% utilisation," he says. "Others are using virtualisation to migrate to fewer, bigger machines and a 10:1 reduction is common." Plenty more are using virtualisation for business continuity and back-up, with similar obvious savings.

"All the high-end server manufacturers – IBM, HP, Dell, Fujitsu Siemens, Sun – are shipping VMware as an option now. We have 25,000 enterprise customers and a survey we ran two months ago showed 80% using VM for running production workloads," he continues. He also points to a recent IDC (analyst) survey showing diminishing server



► shipments, but increasing value: "They're buying fewer low-end servers and more high-end servers, with virtualisation to run more workloads," he explains.

He reckons that the perception of VM as a risky business is changing fast. "The 'my application is not going to behave the same in a VM' brigade are being taken down," he says. And to make the point, he adds that today's VM story is performance management and infrastructure optimisation, for which VMware offers its third generation product VMware Infrastructure. "We also have a capacity planner that looks at the infrastructure and workloads, and assists with migration strategy decisions, and there are tools for deployment."

And there are plenty of other VM tool providers: check out PlateSpin, for example. Patrick Malaperiman, regional director EMEA, says: "We offer tools that help users understand their server estate, its utilisation, and what makes sense in terms of replacement priorities and cycles." Incidentally, he reckons that even SMEs with as few as 10 servers can benefit from virtualisation – if only to cut the cost of business continuity or disaster recovery. "Instead of a physical mirror down the road, they can use a virtual host and use technologies from PlateSpin to take snapshots over a WAN at whatever frequency."

### Remote virtualisation

Beyond that, others are offering software that runs virtualised isolated Windows desktops remotely – a bit like Citrix, but not just thin client. Desktop and server management firm ScriptLogic's director Jon Rolls says: "You can now run a complete virtualised Windows XP desktop in one location and remote display it to a user in a different location." Think of the value for outsourced services: access to applications – including those that don't work on terminal server – without security risks and without the usual high management costs.

But let's change tack: what about fixed/mobile convergence? iPass, which sells mobile connectivity solutions, is one to watch here, and UK director Stephen Dane says there's a lot less hype than reality. "Nowadays, mobile users are most likely to connect using a WiFi broadband Internet [hot spot] connection, Ethernet on an ADSL line, or via 3G from Vodafone or T-Mobile. They have much more bandwidth on all of these, so mobile working is getting as easy as working in the office."

Well nearly. "The mobile operators say you can get 3G HSDPA [the new high speed version of 3G], which gives you 1.8Mbps. T-Mobile, for example, offers HSDPA wherever 3G is available – which is 80% of the population." Which, compared to GPRS at 56kbps, sounds pretty respectable – except that, while it is here, these speeds are maxima, based on no contention at the base station and assuming backhaul connectivity from base station to network is good enough to support concurrent users.

Other issues remain: those areas where some or all of the above just don't connect (at least not reliably); the cost of roaming abroad (set to fall); difficulties of handover between wireless networks on the move; and, of course, security – although Dane insists the latter is yesterday's problem. He does, however, see the next stage

of Metro WiFi networks and specifically WiMax as hype – at least for the foreseeable future.

Which leads us onto the related topic of identity management (IM): ensuring that the right people get the right, secure access to the right systems from wherever they are. Simon Perry, vice president of security strategy at Computer Associates, suggests that the anti-virus, anti-spam, anti-spyware scare industry is hype city – and what matters today is overarching management.

"Gathering information about your security state is useful, because it can give a business expression of risk," he says. "But, secondly, it gives you that in a way that lets you express it to others – such as auditors who are increasingly interested, and business partners who are connected up and down the supply chain."

Beyond that, IM for secure auto-provisioning is also

**"The portal, with its multiple images of an application ... is changing industry"**

*Lorenzo Pengo, Microsoft*

key – although Perry says: "If someone tells you you can implement this in two to four weeks, they're selling you snake oil." Why? Because you're going to need a review of your readiness for IM that looks at security on all your machines, operating systems, applications and networks, and then maps roles and requirements – which also means process analysis and probably redesign.

"But for applications that customers or suppliers are using, identity management is useful," adds Perry. And you reduce the complexity for internal and mobile users with single sign-on. As for timescales: "For a typical SME doing an internal project, that's about a month or two. But if it's a large organisation dealing with partners, then realistically you're into a one- or two-year project."

Last thought: supply chain communications, EDI, web EDI, FTP and so on – what should you be doing? Chris Hayes, marketing manager at Sterling Commerce, says the hype here is any suggestion that you need to rip out what you're doing. "If companies are already doing EDI today, it doesn't make sense to move away."

He does, however, make the point that for manufacturers not running electronic supply chain interactions, EDI over a VAN (value added network) is far from the only way. The various species of XML and connection via the Internet, ConnectDirect, FTP, VPN (virtual private network) are all workable – and you can run systems yourself or use hosted services. "Web EDI hasn't grown as fast as we might have expected, but typically our customers are doing implementations within three months and getting ROI in less than a year," he says.

His view: "You probably need to look at your b2b infrastructure and do some rationalisation. Quite often, it's pretty fragmented. My real concern though, is with FTP. People don't realise what their businesses are doing. There can be masses of data going back and forth and they're not thinking about the security implications." ■

Enter 302 at [www.mcsolutions.co.uk/enquiry](http://www.mcsolutions.co.uk/enquiry)

