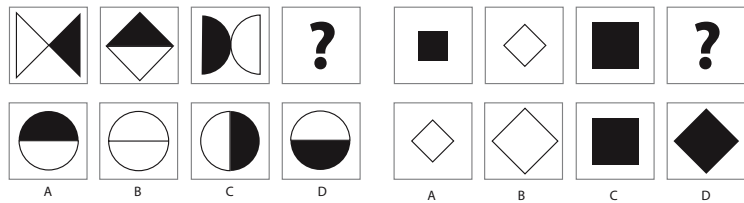




# Rating

**This issue:**

The 5 emerging technologies every business should be watching



## 1 Web 2.0

Collaborative projects such as Wikipedia, YouTube, instant messaging and the blogging revolution have demonstrated that there's far more to the Web than publishing static information. The Web's evolving into a medium for information sharing and two-way communication, and businesses are already beginning to build online communities to solicit and facilitate customer interaction.

Analyst firm Gartner has identified several emerging Web 2.0 technologies. Virtual environments create a 3D space in which colleagues, trading partners, or customers can interact with each other; potential applications include collaboration, training, and selling.

The intriguingly named mashup is a simple application that "mashes" together content and functions from a number of internal and/or external sources such as Google, Amazon, eBay etc. Mashups are quick to create, they're usually personalised, and could be used to say, present information to customers.

Other emerging technologies will help support mashups, says Gartner, including RSS (Really Simple Syndication) which enables web content to be easily distributed to third parties, and wikis: collaborative systems for creating and maintaining collections of linked web pages (such as Wikipedia).

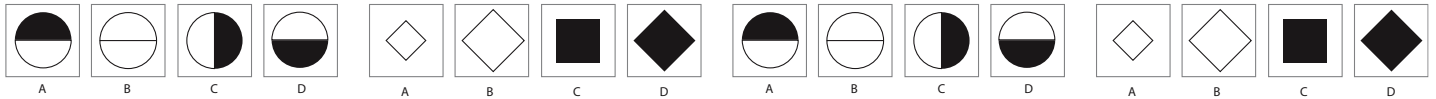
## 2 In-Application Voice and Data Integration

Businesses have been encouraged for some time to economise by combining voice and data traffic on the same network, using technologies such as Voice over Internet Protocol (VoIP).

But Teresa Jones of analyst firm Butler Group believes the next step will be the integration of voice and data in the same application.

Click-to-call options on websites (where a browsing customer can opt to speak live to a staff member) are becoming viable as more people have voice capability on their computers,

and could help smaller businesses to replicate the more "personal" service that differentiates them from larger rivals. Computer Telephony Integration (CTI), which has long been used by large firms to retrieve data about callers and facilitate call transfers, is moving into the price range of SMEs. And computers are starting to talk to people thanks to applications such as voice-directed picking in warehouses, where it can be more efficient for staff to receive instructions via a voice synthesiser than having to read them from a screen.



## 3 Software as a Service

Buying a new software package can be an unwelcome up-front cost, especially if it also requires new hardware to run on. One alternative is Software as a Service (or SaaS – see Insights on page 14), where users pay a regular monthly rental, either a flat fee per user or based on transactions or data usage. The software provider runs the software and stores the data on its own systems, and users access both via an Internet browser.

Previous initiatives stalled because of slow or unreliable Internet access, but the widespread availability of broadband and improvements to browser technology

are giving the concept a second lease of life, says Jones. NetSuite and salesforce.com are probably the best-known exponents of the SaaS model, but many leading and niche software vendors are planning or considering SaaS.

According to Bob Tarzey of analysts Quocirca, SaaS can ultimately cost as much as buying conventional software licences, but it does have significant advantages, including better availability and security, and enabling new ways of working such as remote access and multi-company collaboration. It's particularly suitable for SMEs, says Tarzey.

## 4 Location Awareness

Within three years or so, GPS (satellite-based location-finding) will likely be commonplace on mobile phones and other portable devices. Combined with developments in location-finding on wireless networks and at wireless “hotspots” (public access points), this will enable a growth in location-aware technology and applications, say Gartner.

Any business with workers in the field can benefit from knowing exactly where they are and what they are doing. Field-sales people can receive information relevant to a client they're about to visit; couriers can be directed to their

next pick-up point; the nearest engineer can be dispatched to deal with a customer call-out. Conversely, if a problem occurs, such as an accident or a breakdown, location-aware technology in the vehicle can call for help from the nearest available source.

Security remains a concern, but there are good potential benefits in areas such as field-sales automation, fleet management, logistics, and transport, say Gartner. Vendors include Appear Networks, Avanteon, IBM, LogicaCMG and Webraska.

## 5 Expertise Location and Management

Ever had a problem and felt sure that somebody, somewhere must know the answer? Using computers to identify and capture human expertise has been tried before, but it never took off because it relied on individuals to actively input the information. Now technologies are emerging that can do it automatically.

Examining what users actually do – by analysing their emails, watching who they talk to, logging what information they send and retrieve etc – enables the system to work out what interests them and what they are likely to know.

It can also help identify like-minded individuals and bring them together, physically or virtually, to encourage collaboration.

This is expertise location and management (ELM), which is particularly useful in solving problems that are difficult to explain or communicate. It can be done ad hoc, enabling users to search for people according to their interests or experience, and is more accurate than relying on directories or HR records that are probably out of date.

Vendors include AskMe, IBM, PeopleSoft and SAP.