

Introduction

Global warming and recession does not seem to have dampened the spirit of technologists – in a manner of speaking, it has presented them with new opportunity to work on cleaner, greener, cheaper, safer and more pervasive technologies. Presented below is a synopsis of some of the key trends to watch in 2009. Interestingly a lot of the themes represent focus on cost savings, simplification, collaboration and reduced dependence on large IT teams. Read on to learn more...

Strategic technologies

Gartner defines these as technologies with a significant impact on the enterprise in the next 3 years and these can be either disruptive or need significant investment or the risk of being too late to adopt. **Virtualization** of servers, storage and client devices will continue to be a key focus with a thrust on de-duplication. An example is the proliferation of 'netbooks' which represent a move leveraging virtualization. **Cloud Computing** is gathering significant momentum to make software more pervasive as a service – from a business perspective this will provide elasticity and scalability and also reduce the need to have large IT teams. **Servers beyond blades** – servers are evolving beyond blades to simplify provisioning of capacity to allow for replenishment of only those resources which are scarce – e.g. memory, storage, power etc. and this approach will help reduce waste and redundancy of resources.

Web oriented architectures – Enterprises will move more towards the web as employees work in disperse and cluster environments demanding higher levels of collaboration and availability of IT round the clock. Good examples are eLearning 2.0 and the availability of 'to go' enterprise class certified managed services. **Enterprise Mashups** - a **mashup** is a web application that combines data from more than one source into a single integrated tool. An example is the use of cartographic data from Google Maps to add location information to real-estate data, thereby creating a new and distinct web service that was not originally provided by either source.

Communications 2.0 – The keyword here is collaborative communication - Communication 2.0 is all about convergence of various communication and collaboration tools and platforms such as VoIP, VoWi-Fi, Wi-MAX, Web and Video Conferencing, Enterprise Social Computing, Presence, and IM Management. This helps deliver cost effective internal communication and enables businesses to connect communities that encompass employees, customers, partners and others "outside the firewall". Skype is a great example for this.

Disruptive technologies

These include technologies that will take performance to the next level or simply usher in an entirely new way of working. **USB 3.0** is the next serious effort on which the technical specification has already been delivered – this promises upto 10 times faster data transfer speeds. **802.11n** standard has been ratified and this promises to deliver data transmission speeds of over 300 Mbps or over 7 times faster than current wireless networks. **Android and Linux phones** – Android is the open source operating system from Google and LiMo is the Linux platform – several new mobile phones are expected to sport these technologies and will make phones inexpensive and competitive. **Instant on Computing** – Linux based instant on features are already available using SplashTop's technology and Phoenix Technology is working on extending the trend outside of the Linux realm. With this you don't have to wait for a system boot.

Applied technologies

These include technologies that apply to other 'applied aspects' such as firmware – as an example we can consider some of the technologies going into cars – **Adaptive cruise control** which uses laser guided sensors to determine speed and distance and maintain distance between vehicles; **Traffic and weather navigation alerts** – using real time information superimposed on GPS navigation systems which is scaled and customized for a driver's location and route; **Adaptive headlamps** – that follow a driver's turning the steering wheel which will come integrated into portable navigation systems; **Collision avoidance** – this allows the vehicle to automatically apply brakes if the driver does not heed the warning signs and thus avoid the collision.

To conclude...

So, there is plenty to look forward to and plenty to experiment with – if you have got the cash, the time and the risk taking ability. Maybe with all of the above you could also consider checking out Garmin's Nviphone and ask it "where am I"? or perhaps check out GE's OLED lighting for wallpapers with custom lighting! Have a safe and prosperous new year....