

By Larry Dignan

Gartner on Tuesday outlined the 10 technologies it thinks will give technology execs the most bang for their budgets in 2011. How many of these technologies will be a true hit?

Carl Claunch, an analyst at Gartner, said at the research firm's Symposium conference in Orlando that things like sustainability, data center overhauls, and virtualization were dropped. Here's Gartner's 2011 list, why those technologies were chosen, and a few observations.

1: Cloud computing

This group of technologies has been on the top 10 lists for a few years. Now everything as a service will alter business models and IT procurement. Gartner analyst David Cearley said what has changed is that there are multiple services. Companies will probably need cloud computing brokers. Things to watch:

- Where does the public cloud fit? IT is generally scared of the public cloud, but select workloads are fine.
- Beware cloud washing. IT execs are comfortable with the vendors cloud washing but may not get real capability.
- Limit access to specific clouds based on community and groups. That approach would minimize security risks. Gartner has exclusive clouds and community clouds as services to watch.
- Private clouds are custom and packaged.

My impression: A safe pick for sure, but the cloud is getting more granular as it matures. Think cloud washing magnified.

2: Mobile apps and media tablets

Tablets and touch aren't new. Claunch said that the selection of applications changes the game for businesses. "Apple has leveraged the ecosystem of the iPhone," Claunch said. "And Apple has created consistency." In addition, Apple's iPad is the poster child for how consumerization is affecting corporate IT. Things to think about for enterprise IT:

- Enterprise apps will need to be designed for the tablet.
- Delivering these apps gets complicated due to the selection of platforms.
- Context-aware computing can connect to customers better.
- Marketing will drive a lot of projects to utilize tablets, but these devices can be used for inspections, surveys, image capture, documentation, and training.

Cearley added, "The PC era is over. Think of mobile design points."

Technologies You Can't Afford to Ignore — Tablets Hot Near Term; Midterm Fabric, Context & UXP Impact Is Big

<p style="text-align: center;">Top 10 Strategic Technology Areas for 2010</p> <ol style="list-style-type: none"> 1. Cloud Computing 2. Advanced Analytics 3. Client Computing 4. IT for Green 5. Reshaping the Data Center 6. Social Computing 7. Security — Activity Monitoring 8. Flash Memory 9. Virtualization for Availability 10. Mobile Applications 		<p style="text-align: center;">Top 10 Strategic Technology Areas for 2011</p> <ol style="list-style-type: none"> 1. Cloud Computing 2. Mobile Applications & Media Tablets 3. Next-Generation Analytics 4. Social Analytics 5. Social Communications & Collaboration 6. Video 7. Context-Aware Computing 8. Ubiquitous Computing 9. Storage Class Memory 10. Fabric-Based Infrastructure and Computers
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■ Modified for 2011 ■ New for 2011
■ Dropped for 2011

Gartner

My impression: It's stunning how many iPads are in this crowd of 7,000-plus IT execs and managers. Another thread: Almost all of these IT execs are carrying PCs not Macs. Typically, CIOs and the like are the last to get on board an early adoption curve for a new device. There's a frenzy over tablets.

3: Next-gen analytics

Companies need to develop "operational analytics" to make predictions and use data mashups. "There's value in very current information. We are now shifting our focus to start doing simulations and modeling to predict the future," Claunch said. These simulations would ultimately be run on smartphones and other devices. Algorithms will really matter to companies to support the right type of prediction.

Gartner didn't advocate doing a lot of analytics investment yet, but be ready to invest.

My impression: Analytics is largely untapped ground for many companies. Claunch's key point: "This is just being enabled now." Another key item: A show of hands revealed that the entire room had business intelligence software. A show of hands also indicated that no one thought those applications were delivering real value.

4: Social analytics

This concept revolves around taking social networking data and incorporating it into enterprise analysis. Sentiment, context, and influence are key areas for companies. "We're starting to see the tipping point," Cearley said. "It's moving from bleeding edge to mainstream activity." For now, look at communities you have to support and analyze an entry.

My impression: CIOs should be watching this stuff, but given the crowd response to business intelligence, I'm not seeing much progress on the analytics-social intersection.

5: Social communication and collaboration

Social collaboration is "inevitable," Cearley said. "Over the next few years, it will be impossible to ignore this," he added. By now, companies should have policies, high value social uses identified, and have experiments to link social with CRM systems. Meanwhile, unified communications will merge with social. Expertise location will probably be the best use case.

My impression: Gartner makes a good point, but I'd be willing to bet that enterprises are way behind the curve on social communication and what it means for collaboration and productivity.

6: Video

Corporate use of video is going mainstream. Low-cost video recorders are everywhere. Companies will need video content management systems and better design skills, and they'll need to address privacy issues and policy concerns. Will all conference rooms be recorded by default? E-learning, merchandising, marketing, webinars, and telepresence will all be key video uses. The tipping point will come in 2011 to 2013. In addition, video will be needed to reach younger employees.

My impression: Video has hit mainstream, but networks haven't. Will Vlogs really be the best use of employee time? One other key point: How will business intelligence systems digest video content?

7: Context-aware computing

The idea here is that social analytics and computing leads to knowledge about preferences. User interfaces would change based on context. Today, it's all reactive. By 2011 to 2013, there will be more proactive alerts. By 2014 to 2018, you'll have context integrated with enterprise systems. Ultimately, there will be a context platform. Portals, mashups, mobile, and social will combine. Vendors will offer "user experience platforms."

My impression: I have a hard time seeing strapped enterprises going all contextual. Look for business units such as marketing to launch these projects to drive sales. Companies will need to deliver context-aware services to businesses. Can't wait for all of those user experience platform pitches.

8: Ubiquitous computing

This topic has been discussed in previous years on Gartner's lists. In a nutshell, computers melt into objects. There will be machine-to-machine connections, portable personalities, and connectivity changes across multiple devices. There will be thousands of computers for each person on the planet, and you'll have multiple devices.

My impression: Ubiquitous computing is more a guiding principle for projects than something you think about in terms of budget. The timeline here is decades. What's also notable: Everyone has punted on getting one device to consolidate them all. We're doomed to carry a bunch of devices.

9: Storage class memory

When Flash meets RAM, there are differences in speed and costs. Persistent storage will also alter management. Claunch said that storage class memory goes beyond solid state drives. This new class of storage will lead to software where operating systems determine where data goes. Storage class memory will become more important over the next two to three years.

My impression: It's a bit experimental, but storage class memory will ride shotgun with analytics. Companies will have to define what data goes into fast memory.

10: Fabric based infrastructure and computers

Every vendor will talk fabric computing, so get ready for fabric-washing. The overall idea here is that you'll have infrastructure that manages resources in an integrated fashion. Cisco UCS and HP Matrix are examples. New ways of building servers will mean you buy pools of processors and memory instead of physically swapping boxes.

My impression: Forming your own flexible servers sounds appealing. The fabric thing sounds way futuristic for now, but the seeds are being planted.

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