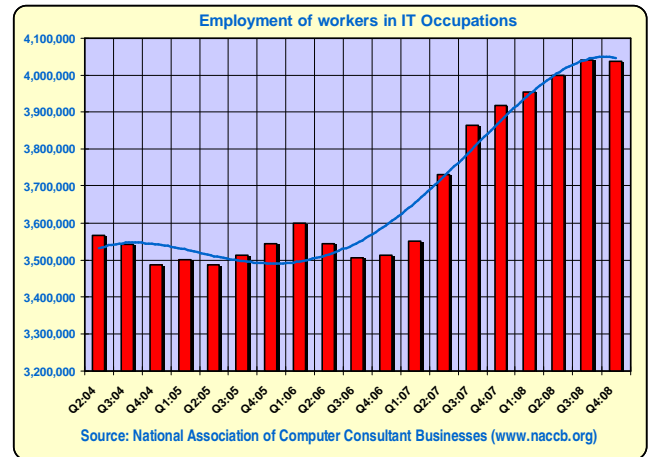


Technology Trends for 2009

Slower economic growth and more cautious spending mean companies will be more judicious and vigilant when it comes to IT expenditures. This new mindset will affect how the entire technology market advances in the coming year. Here's how.

- ◆ For two core reasons, **SMBs (small- and medium-sized businesses) will be looking more closely at IT managed services** for IT system solutions:
 - ⇒ The upfront costs are lower compared with building their own IT systems.
 - ⇒ The fixed, known monthly fee can be easily included in organizational budgets.
- ◆ **Cloud computing** will be especially attractive in challenging economic times for several reasons:
 - ⇒ It is subscription-based with relatively low upfront costs (no development required).
 - ⇒ Off-site backup and archiving services via the Internet are a common type of cloud computing. As companies cut back on hardware upgrades, costly maintenance and software updates, companies cannot afford to become negligent in backing up and archiving essential company data.
 - ⇒ Just as CIOs and companies are warming to the concept of SaaS (software-as-a-service), along comes PaaS (Platform-as-a-Service). Another kind of cloud computing, PaaS takes SaaS one step further by furnishing the entire computing platform, not just an application or software program.
- ◆ The **sale of notebook computers will continue to surpass desktop machines** as companies push workers into the field in order to be closer to customers while reducing office space costs. This migration will increase the need for VPNs, firewalls, central company data repositories and innovative security solutions.
- ◆ Look for **further interest in managed print services**, which is a "form of outsourcing that addresses the rationalization of office equipment and its maintenance," according to *CFO Magazine*. Printing and copying can be an insidious expense that many organizations will want to cut in today's tight economic times.
- ◆ Implementation of **green initiatives will grow** for environmental as well as for cost-saving reasons since one major result of greener IT is reduced energy consumption. This will result in more remote and automation services (e.g. automatically shutting down of machines).



IT Spending in 2009: Hard Numbers

Although the economy is not expected to start recovering until the second half of 2009, most IT consultancies project growth in IT spending for the year, albeit at slower rates than previously estimated.

Forrester's latest report, released mid-January, expects the technology sector in the U.S. will do a little better (up 1.5%) than in other areas of the world. Forrester expects IT outsourcing services to "hold up better" than hardware and related systems integration purchases.

IDC revised its forecast for 2009 IT spending downward late last year. "IT is in a better position than ever to resist the downward pull of a slowing economy," according to IDC. "Technology is already deeply embedded in many mission-critical operations and remains critical to achieving further efficiency and productivity gains."

Their latest worldwide forecast for IT spending was revised down to 2.6% growth, which is down from the "pre-global financial crisis" estimate of 5.9% growth. IDC also expects hardware spending to decline, while software and services should still post gains. For the U.S., IDC expects IT spending will grow only 0.9%, revised from 4.2% forecasted in August.

A Gartner survey of more than 1,500 CIOs worldwide released in mid-January found that IT budgets are essentially flat in 2009 with a projected increase of only 0.2%. Gartner also queried the CIOs about their priorities for the year. As the graph of their responses below illustrates, improving productivity and cutting costs for existing activities are at the top of CIOs' agendas.

Business priorities	Technology priorities	Ranking (for both)
Business process improvement	Business intelligence	1
Reducing enterprise costs	Enterprise applications	2
Improving enterprise workforce effectiveness	Servers & storage technologies (virtualization)	3

IT Professionals Still in Demand

Despite deteriorating overall employment conditions in the fourth quarter of 2008, unemployment rates for most IT workers were lower than the overall unemployment rate, which rose to 6.1%. The unemployment rate was less than half that for several skilled IT and computer occupations, such as computer and information systems managers, computer and information systems managers, computer support specialists, computer scientists, systems analysts and computer software engineers.

Occupation	4Q:08 Unemployment rate
Computer hardware engineers	1.4%
Computer and information systems managers	2.7%
Computer support specialists	2.2%
Computer, automated teller, and office machine repairers	5.0%
Computer programmers	6.1%
Computer scientists and systems analysts	3.0%
Computer software engineers	1.9%
Database administrators	5.4%
Network and computer systems administrators	3.5%
Network systems and data communications analysts	3.6%

Source: Unpublished tabulations of Current Population Survey data furnished by the U.S. Bureau of Labor Statistics.

Wage increases in several IT/high-tech sectors continued to surpass the national average, which was up 4.3% in the past year. And while the length of the workweek did not change for the average worker, workers in many IT/high-tech sectors were working longer hours.

The expanded workweek for IT/high-tech professionals can be interpreted two ways. In the first scenario, more tech work is required so organizations increase the number of hours for workers. In the second scenario, organizations are feeling the economic squeeze and are reducing the total number of workers. In this case, the remaining technologists need to put in more hours to get the work done.

Professionals in the Internet publishing and broadcasting and Web search portals sector are in high demand. They saw their hourly wages grow by 8.0% and their weekly paychecks rise by 21.6% as a result of the workweek increasing by 12.6%.

Likewise for workers in computer systems design and related services who were earning almost 5.0% more per hour and working 3.1% more hours per week. Combined those numbers equate to an average weekly wage increase of 8.2%.

CIO Success Strategies

Make IT's Value Known!

Executives should always work to demonstrate their value to the business and even more so in these turbulent economic times. Unless senior management clearly understands how IT is contributing to business strategy and innovation, a CIO risks becoming irrelevant, and even unemployed.

CIOs and their IT organizations should never be seen as the implementers of others' ideas. IT must be recognized as an integral player in the formation and implementation of a company's long-term strategic plan. Such standing is more easily achieved when the CIO reports directly to the CEO. Here are some other ideas on ways to help ensure the value of IT is properly recognized.

- ◆ Bring other C-level executives into the CIO's circle of influence by forming an IT steering committee that ensures the company's goals are consistent with IT activities. It's important for CIOs to build bridges and win consensus.
- ◆ One of the best ways to make certain IT has high visibility is to have a high-profile security team.
- ◆ Distribute a regular (monthly, maybe quarterly) status report of IT projects throughout the company.
- ◆ Don't concentrate too much on technology at the expense of business strategy. Technology isn't the solution to a business problem, but business solutions can be technology-enabled.

Inshoring, Backshoring, Onshoring?

Whatever It's Called, It's Back

There has been a lot of talk recently about companies bringing offshore services back into the domestic market, much in the way Dell famously repatriated some service operations. Even offshore giants, such as Wipro Technologies, are opening U.S. service centers.

With 200,000 service employees worldwide and a name some consider synonymous with IT outsourcing, IBM has started to hire closer to home. In mid-January, the company announced that its two newest global service delivery centers will be located in East Lansing, MI, and Dubuque, IA. Several factors, including favorable tax incentives, local wage rates and a partnership with local universities to produce a skilled workforce, contributed to the location selection for these two new service centers.

According to *BusinessWeek*, "Industry analysts expect more tech services outfits to establish operations in low-cost parts of the U.S. in the coming months and years."