



INDUSTRY ANALYSIS: IT Consulting and Services

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Industry Overview

Today's digital age has made it impossible to read a news story or magazine article without knowing about the impact of information technology (IT) on our society. Information is traveling faster and being shared by more individuals than ever before. In addition to becoming faster, IT also has become more convenient and efficient. One can buy just about anything online, surf the Web on a mobile phone and use a wireless Internet connection at most establishments.

In the business field, an increasing number of companies are realizing the importance of employing IT in their operations. Companies have linked their many systems together to help them fill orders on time and serve their customers better. Software companies are continually developing new products to help streamline work and achieve better results. Seeking to harness the power of IT, many organizations are tapping IT experts.

IT consulting is a field that focuses on advising businesses on how best to use information technology to meet their business objectives. IT consultants provide expert advice and assistance in the fields of writing, modifying, testing and supporting software to meet the needs of a particular customer. They also plan and design computer systems and integrate computer hardware, software and communication technologies. In addition to providing advice, IT consulting firms often estimate, manage, implement, deploy and administer systems on behalf of companies. This process is known as outsourcing.

This industry also includes healthcare technology, since work in many hospitals has become totally technology driven with electronic data storage systems taking care of the administrative, financial and clinical aspects. Information technology allows healthcare providers to collect, store, retrieve, and transfer information electronically.

Management consulting and IT consulting are separated by a relatively unclear line, and sometimes the two fields overlap. IT consultants, however, often have degrees in computer science, electronics, technology, and management information systems, while management consultants often have degrees in accounting, economics, industrial engineering, finance and a generalized Masters in Business Administration (MBA).

The IT consulting industry can be viewed as a four-tier system: a) Professional services firms which maintain large professional workforces and command high bill rates; b) Staffing firms which place technologists with businesses on a temporary basis; c) Independent consultants who are self-employed; and d) Information security consultants.

Latest Activities and Major Players. In 2010, the global IT Consulting and Services industry recorded a total revenue of \$516 billion, representing a compound annual growth rate (CAGR) of 3.9 percent for the period spanning 2006 to 2010. The integration and development services segment was the industry's most lucrative, with total revenue of \$254.2 billion or 49.3 percent of the market's overall value.

The U.S. IT services industry includes about 100,000 companies with combined annual revenue of about \$290 billion. The following are the major players in the U.S. telecom services industry and their revenue:

- International Business Machines Corporation \$100 billion
- SK C&C Co Ltd \$79 billion
- Accenture Plc \$23 billion
- NTT Data Corp. \$14 billion
- Cap Gemini SA \$12 billion
- SAIC \$11 billion





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Revenue Drivers. A consulting firm sells time and adds value for clients by hiring out its only factor of production, thereby offering the client flexibility. Consulting firms guarantee to clients the skill of professionals as needed and as long as needed, as well as the supply of reserve professionals. The IT Consulting and Services industry is valued as the revenue accrued from the provision of IT and systems integration services and information management services.

Fees of IT consulting firms are based on the level of service, knowledge, experience, project or transaction complexity and value of services. These are usually measured on a per day and per consultant basis. An alternative option is the fixed fee which applies only to projects which are well defined, such as infrastructure refreshment projects, network design, trouble-shooting consulting, implementation of specific well-described features, such as monitoring platforms and infrastructure capacity planning.

Generally, fixed fee consulting is for a specific amount of work conducted within a defined timeframe. Many companies are moving towards a fixed priced consulting model. This trend is expected to continue as more companies now require delivery of consulting services within a defined time and price structure. Open-ended consultancy models generally favor the consulting firm. As the consultancy firm is rewarded on a per day basis, there is no incentive to complete assignments within a fixed time.

Cost Structure. Salaries of IT professionals have replaced hardware as the greatest IT cost for many organizations. Depending upon the nature and location of the company employing the IT consultant, this starting salary could range from \$40,000 to \$131,000. The salary provided to the individual is often related to performance and impressive bonuses are common. The cost estimate of an IT consulting firm is prepared by adding the remuneration of consultant staff and the direct expenses to be incurred by consultants during the execution of their duties. Those figures are based on an estimate of the staff time – expert per unit of time, hour, month – required to carry out the services and an estimate of each of the related cost components. A major bulk of the budget is required for capital expenditures such as purchasing computer hardware and software and to establish licensing agreements with several software vendors. An IT consulting firm also has to take into consideration expenses relating to office rent, supplies, travel and transport, mobilization, communications, surveys and training programs, as well as taxes and duties.

Industry Trends

The performance of the IT consulting industry is forecast to decelerate, with an anticipated CAGR of 2.7 percent for the five-year spanning 2010 to 2015. This is expected to drive the industry to a value of \$587.8 billion by the end of 2015. Trends, threats and opportunities in this industry follow:

• Offshoring to India to continue. Offshoring has become a popular trend in the information technology service industry to the extent that some people are calling this a 'stampede' as firms try to be the first in the run towards offshoring. The International Data Corporation (IDC), a market research analysis firm, estimates the global demand of IT services at \$847 billion. This demand is expected to reach over a \$1 trillion within this decade. The National Association of Indian Software and Service Companies (Nasscom) predicts that the offshore component of global IT services will rise from \$39.6 billion to \$70 billion over the same period. In this trend related to offshoring of business and technology services, India has emerged to be one of the important destinations taking the top spot as a technology offshore destination among U.S. businesses. This has led to tremendous growth in the IT and Information Technology Enabled Service sectors (ITES) in India. While the ITES sector has grown from \$0.6 billion in 2000 to \$8.4 billion in 2007, the software services sector (a major part of IT industry) has grown from \$5.3 billion in the 2000 to a whopping \$31.4 billion in 2007. Further, the combined growth in terms of CAGR in the IT and ITES sectors has been 28 percent.





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While the biggest share of IT services still comes from offshored custom application development and maintenance activities, the IT services market today includes several value added services such as packaged software implementation, systems integration, network consulting and integration, IT consulting, and IT support and training. Similarly, in the business process outsourcing (BPO) sector most of the initial work was in the area of offshored call centers dedicated for technical support. However, today the ITES sector also includes the Knowledge Process Outsourcing (KPO) activities that include several value added services such as mortgage processing, medical claims processing, investment banking analysis as well as research and development activities.

Three main reasons that are often cited for picking India over other regions for offshoring activity are cost competitiveness, highly skilled labor pool and high level of service maturity. It is true that a decade ago cost differential was relatively large between India and the western world for technical talent. Over the last decade, however, that gap has been reduced substantially. It is also true that India possesses a large pool of technical talent. Based on Nasscom estimates, India produces more than 2.3 million graduates and an additional 300,000 post graduates each year from its 347 institutes of higher education. About 495,000 of these graduates are engineers.

Search for "green" information technology. Experts say that the future of information technology lies on more energyefficient hardware, software that helps manage power usage, zero-emissions facilities and lower thermostats in data
centers.

While the global economy has recently been declining, spending for green information technology is soaring. Forrester Research, a technology market research firm, expects the \$500 million spent on green IT services in 2008 to reach \$4.8 billion by 2013. While the economy has made it harder to go green simply for public relations value, executives are finding other reasons. Tech cycles are short and, as older hardware needs to be replaced, firms are consolidating and upgrading to greener models. Some global executives are also hedging their bets as they await U.S. regulations to cap carbon emissions; a new emission trading law goes into effect next year in the U.K.

The potential for quick savings from green IT has caught the attention of corporate giants and small businesses. Technology pioneers Microsoft and Google are building green data centers near cheap hydroelectric power sources in the Pacific Northwest. The world's fifth largest commercial airline, Continental, has saved more than \$2 million through server virtualization. Highmark, a health insurer in Harrisburg, Pennsylvania, with 4.5 million members, cut its electric bill by 10 percent last year, and halved its 400 servers, by building a more efficient data center with help from IBM. The recession has made it more difficult for companies to invest in multimillion-dollar data centers, but there are alternatives that make the economics work quicker. In data centers, server virtualization, changing the layout of devices, and using more heat-resistant hardware can cut the number of servers needed and reduce cooling costs.

Tech manufacturers are heeding the call. In Microsoft's Vista operating system, the company added 30 new power management features, including an improved "sleep" mode that can save customers an estimated \$50 a year in energy cost for every PC. Computer servers are now being designed to be more heat-resistant so that data centers do not have to be kept so cold. HP and IBM, among other IT firms, now make a business of conducting "energy analyses" for clients and offer up "green" plans for IT.

Business impact of IT advances. As the world is in the midst of the transformation phase of information technology, enterprises are shifting their focus toward digitizing their operations. Managing the value created by the digital economy is becoming more challenging as the economy goes increasingly digital. An emergence of mobile financial services and mobile banking services uses non-banking infrastructure like the merger of super telecom technology with banking services. Enterprises are becoming more dependent on data, and digitizing their enterprise to increase service quality-and grow revenue.





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Cloud computing is a technology that uses the Internet and central remote servers to maintain data and applications, and allows for more efficient computing by centralizing storage, memory, processing and bandwidth. This has transformed the old information technology architecture into a new paradigm. Near field communication (NFC), unified threat management (UTM), next generation firewall, cloud computing, web services, and service orientation immensely contributed to this new business process landscape. While this is not new, most enterprises are starting to realize the value of this information technology.

It is very clear that the technology is blending with the business to support the dynamic nature of the new economy. The mobile web is now matured. The rise of social networking, globalization and the availability of global resources, as well as the onset of real time data streaming and access to information are changing the traditional data center concept. These are all becoming interconnected and the advancements in technology are driving this at a greater speed. One new approach that is helping to address these issues is cloud computing. This trend is seen as one that will greatly change the way people acquire, deploy and manage IT services.

The scope of IT strategy has been extended. Physical consolidation, virtualization of servers, storage, network along with right provisioning and workload management technologies can be leveraged to accomplish an optimized and efficient underpinning cloud computing infrastructure. Augmenting existing strategy and roadmaps may suffice to fulfill the current transformation need. Delivery channel and the web component, however, need significant architecture work. That includes social media strategy, collaboration, governance for the new added fabric and security. As a major support service for a large number of businesses, the IT consulting and services industry depends heavily on developments in computer software as well as hardware. As a result, this changing environment has had, and will continue to have, a significant impact on this industry.

Steady rise of the global digital age. Over the next years, a wide range of developments will lead to many new IT-enabled devices and services. Rapid diffusion is likely because equipment costs will decrease at the same time that demand is increasing. Local-to-global Internet access holds the prospect of universal wireless connectivity via handheld devices and large numbers of low-cost, low-altitude satellites. Satellite systems and services will develop in ways that increase performance and reduce costs.

By 2015, information technology is expected to make major inroads in rural, as well as urban areas around the globe. Moreover, information technology need not be widespread to produce important effects. The first information technology "pioneers" in each society will be the local economic and political elites, multiplying the initial impact.

Among developing countries, India will remain in the forefront in developing information technology, led by the growing class of high-tech workers and entrepreneurs. China will lead the developing world in utilizing information technology, with urban areas leading the countryside. Beijing's capacity to control or shape the content of information, however, is likely to be sharply reduced. Although most Russian urban-dwellers will adopt information technologies well before 2015, the adoption of such technologies will be slow in the broader population. Latin America's Internet market will grow exponentially. Argentina, Mexico, and Brazil will accrue the greatest benefits because of larger telecommunications companies, bigger markets, and more international investment. In Sub-Saharan Africa, South Africa is best positioned to make relatively rapid progress in IT.

Clearly, the IT consulting and services industry is fast becoming globalized because of continually evolving technology, which allows hassle-free online development of computer systems. The majority of players in this segment are operating in international locations to capitalize on low labor costs in developing countries.





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Mergers and Acquisitions in the Technology Sector. Big-ticket deals drove the aggregate value of global technology mergers and acquisitions (M&A) to \$52.1 billion in the second quarter of 2011, nearly doubling the deal value from an already strong first quarter, according to Ernst & Young's Global Technology M&A update. The surge was powered by industry consolidation and by ongoing disruptive innovation in areas such as cloud computing, smart mobility, Internet and mobile video, the smart grid and solar energy, the report states. The \$52.1 billion in Q2 2011 aggregate value was 69 percent higher than the year-earlier quarter. The average value for deals with disclosed-values rose to \$194 million – the highest quarterly average since the first quarter of 2000, during the dot-com boom. Top deals that have been announced but are still pending include: Western Digital Corporation will acquire Hitachi Global Storage Technologies for \$4.25 billion; Qualcomm will acquire Atheros Communications for \$3.22 billion; eBay will acquire GSI Commerce for \$1.96 billion; Verizon Communications will acquire TerremarkWorldwide for \$1.26 billion; and CSR will acquire Zoran Corporation for \$637 million.

Given a strong first quarter start to the year and the unleashing of big-ticket deals in Q2 2011, there is increasing momentum behind global technology M&A transactions heading into the second half of the year. Moreover, technology companies continue to stockpile cash, which gives them the flexibility to act when strategic M&A opportunities arise. In aggregate, the cash and investments held by the industry's top companies grew to \$591 billion by the end of Q2 2011 – an 18 percent year-on-year increase from \$499 billion at the end of Q2 2010. Although these are not IT consulting deals, the consolidation of technology companies, and the factors driving this consolidation, has an impact on this industry and the services it provides.

• Emergence of Technology as a Service (TaaS). Across all operating areas, organizations are taking operating efficiency to a new level. This is being exacerbated by challenging economic times, and the need for organizations to be more responsive to changing market conditions. Since fixed-cost models burden organizations with assets and large amounts of depreciation, the trend toward user provisioning of IT requires a more flexible acquisition model that gives greater agility in both IT and the business. Going forward, the burgeoning number of technology as a service (TaaS) offerings that will emerge during the next five years will give firms new acquisition models. In the area of staffing, reducing the number of salaried IT professionals and shifting to a model of using more contract labor will move more fixed costs to variable costs while compensation changes – such as putting more pay into the performance-driven category – can also help reduce fixed costs.

Prominent industry trends such as TaaS and the need for greater business flexibility will increase the importance for more variability and IT leaders need to recognize and balance the strengths, weaknesses, opportunities and threats of variable cost structures. Some of the biggest challenges are expected to come from businesses internal capabilities, such as demand management budgeting and forecasting, and vendor and asset management, all of which will need to evolve to exploit new acquisition models.

• Role of Technology in Healthcare. Today, key areas in information technology in health care are: medical interventions, decision support systems, improving patient access to information, storing records and images and telemedicine. It has been predicted that a number of specific developments in IT will take place such as the linkage of computerized patient data between all hospital, community and primary care services and settings, artificial intelligence-based elderly and handicapped support devices, picture archiving communication systems, and full personal medical records on smartcard. The potential of computers to contribute to medical interventions in the body is extensive. To date, such interventions have been mainly concerned with rehabilitation and enablement: researchers have used computer signals to bridge damage to patients' spinal cords, and to develop electronic cornea implants and computer-assisted hearing. There are a growing number of projects that are looking for alternative ways for humans to communicate with computers and much of the work is aimed at helping the disabled.





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Pooling information or storing of medical records and medical images will allow seamless access to pertinent patient records, radiographs, pathology slides and pharmacy information. Patient information will be able to be stored in archives that can be accessed by authorized medical personnel anywhere in the world. With video conferencing, virtual surgery and telemedicine already a reality, IT is blurring concepts like point-of-care and care provider. Expert advice can now be given remotely – in space and in time.

Business Initiatives and Risks

The information in this section covers a broader industry than the rest of this report.

The key challenge for IT services firms is to successfully navigate their way in a maturing market where heady growth and wide margins are a thing of the past, and bitter price wars are a thing of the present. These issues create business initiatives that industry players must consider for growth and survival. Pursuing, and not pursuing, these initiatives come with risks to companies in this industry.

Key business initiatives for the IT services industry involve strategy, marketing and sales, and product development. Strategy business initiatives may entail revamping entire business and revenue models, increasing focus on market niches, and attracting the talent needed to accomplish these strategies. Marketing and sales initiatives seek to grow revenue by expansion, through broader penetration into existing markets with new services, and creating new markets altogether for existing and new services. Product development initiatives include accelerating and streamlining in-house product development processes.

Strategy

The IT services industry is a constantly evolving industry, dealing with new levels of technology year-to-year, and even month-to-month. Industry players need to consistently redefine themselves, repositioning into areas of growth. With IT consulting one of the best growth areas of the IT services market, companies focused only on system integration and other general IT services will be interfacing with corporate technology teams who increasingly no longer have the keys to the safe. By developing or acquiring a strong and experienced technology consulting team, IT services companies can both interact with decision-makers and have more control over technology implementation. As corporations see IT cost mushroom, more are looking for a utility delivery model, where a monthly fee is paid based on consumption, which is another business model needed to be considered by IT services firms. Most importantly, IT services firms need to position themselves around the areas of growing concerns of customers, which includes services related to service oriented architecture, spiraling demand for security and storage, and various virtualization services that allow corporations to optimize their IT resources.

All of these business model changes require organic structural adjustments, but acquisitions and partnerships are also key pieces of this puzzle. Partnerships help IT services firms to acquire hardware needed for their clients at affordable prices, and allow these firms to up-sell basic niche services of their partners in growing areas into consulting opportunities. Another business model imperative is to expand globally, as most corporations have global dealings through direct subsidiaries, customers, and partners. A global perspective is of particular importance when dealing with the multi-vendor approach demanded by more corporations. A greater geographic coverage is needed to retain customers demanding more flexibility on a global basis.





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Components of Strategy business initiatives include:

- · Redefine the business model;
- · Pursue growth through acquisitions;
- · Pursue growth through partnerships and alliances;
- Pursue growth through global expansion;
- · Increase focus on niches; and
- Attract and retain high-caliber talent.

The following tables outline risks associated with these Strategy business initiatives.

Strategic	Operational				
New product/service fails in the market Ineffective business model/positioning strategy Business initiative damages company's vreputation Business initiative dilutes company's brand New geographic initiative leads to regulatory and political exposures Business initiative exposes company to IP infringement	Product development stalls from ineffective sourcing of resources Business initiative fails from lack of qualified human capitates. Inefficient operations render initiative unprofitable. Inadequate support cause products/services to fail. Customer satisfaction suffers from poor service and support. Liability assumed by contract.				
Financial	Hazard				
Currency fluctuations cause earnings volatility in home currency Lack of access to capital markets (equity and fixed income) Inadequate cash flow to support daily operations Low bank borrowing capacity/inadequate lines of credit Exposure to financial market volatility through investments Improper hedging techniques cause exposure to market volatility	 Facilities, equipment, data or inventory damaged or destroyed by fire, explosion or catastrophe Lawsuits arising from contract disputes Lawsuits arising from performance or non-performance of professional services Lawsuits by shareholders arising from errors or omissions of directors or officers Lawsuits arising from infringement of copyrights or patents Lawsuits arising from libel or slander 				

Marketing and Sales

The demands on the IT services industry require firms to constantly offer services on the leading-edge, and not just for growth, but for survival. In order to improve on the efficiency of operations and to make IT infrastructure affordable, corporations are focusing on service oriented architecture, which is the standardization of all applications. IT services around identifying and marketing this architecture, including consulting services of formulation and implementation strategies, are growing areas. With the exploding use of data by companies, and the growing threats to that data and the IT infrastructure in general, services of a Managed Security Services Provider has become essential for corporations seeking to transfer security risks to professionally run organizations. Other services around data are growing as well, from data archives, to disaster recovery, to offsite monitoring.

Increasingly, many software companies are transitioning from an application service provider (ASP), which delivers software in a downloadable format, to a Software-as-a-Service (SaaS) company, where software in a centralized datacenter is access via the Internet. This shifts the burden of operation and maintenance of the software and IT infrastructure from customers to vendors. Since data centers and hosting facilities are required by these software firms, IT services are needed from hosting, to storage services, to systems integration, to managed service providers, to consulting.





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With corporations affected by the international environment more than ever in this age of globalization, combined with their preference for outsourcing IT to multiple vendors, selling global services is essential. Both new opportunities in new markets must be pursued, and offering IT services that can cross regions of the world must be offered to retain existing contracts and build new ones. If U.S. IT services firms are not willing to go global, the world is certainly willing to come to the U.S. Outsourcing firms from places as far off as India are sprouting up, and the advent of broadband Internet has made their services as accessible as the firm down the road. To remain competitive with firms from these lower-cost locations, offering new leading-edge services in new markets is essential to compete in areas other than price. Offering consulting services is the ultimate differentiator.

Components of Marketing and Sales business initiatives include:

- Grow revenue through increased penetration of existing markets with new products and services;
- Grow revenue through penetration of new markets with existing products and services; and
- Grow revenue through penetration of new markets with new products and services.

The following table outlines risks associated with Marketing and Sales business initiatives.

Strategic	Operational			
New product/service fails in the market Product obsolescence Business initiative damages company's reputation Business initiative dilutes company's brand New geographic initiative leads to regulatory and political exposures	 Inadequate support cause products/services to fail Inadequate production capacity to support initiative Customer satisfaction suffers from poor service and support Compliance procedures breakdown creates liability exposure Inadequate information processing systems create inefficiencies 			
Financial	Hazard			
Decline in credit rating Lack of access to capital markets (equity and fixed income) Inadequate cash flow to support daily operations Interest rate rise causes increased cost of capital Inflation causes cost increases Large capital investments cause cash strain Inadequate capital investments restrain future growth	 Lawsuits arising from contract disputes Lawsuits arising from performance or non-performance of professional services Lawsuits arising from employment-related activities Lawsuits by shareholders arising from errors or omissions of directors or officers 			

Product Development

A product development strategy is crucial to IT services firms in today's environment, but it should be closely aligned with a business strategy that takes into account the company's stronger areas of expertise. New product development, in the IT services context, is gaining new expertise in a more promising market sector, or "packaging" expertise and intellectual property for replicable delivery and use in a specific application. By scaling their ability to deliver the specific range of services where they have focused their efforts, IT services firms can attain higher margins. This is particularly important in a commoditized market where much competition is on the basis of price.





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Increasingly, product development for IT services firms is the upstream movement into technology consulting, the fastest growing sector in the industry. The consulting approach has become necessary as technology spending increasingly revolves around business processes, not technology processes. In fact, companies are often reshaping their business models and branding around technology consulting.

One area of new product development that will enable services firms to stick to their knitting yet offer complete solutions to clients is partnering with firms that offer complementary technologies – or capabilities that enable current offerings to scale.

Components of Product Development business initiatives include:

- Accelerate pace of in-house product development;
- · Establish alliances and partnerships to develop new products; and
- Streamline the product development process.

The following table outlines risks associated with Product Development business initiatives.

Stra	tegic	Operational			
•	New product/service fails in the market Product obsolescence Business initiative damages company's reputation Business initiative dilutes company's brand Business initiative exposes company to IP infringement Inadequate or ineffectual allocation of resources	•	Product development stalls from ineffective sourcing of resources Business initiative fails from lack of qualified human capital Inefficient operations render initiative unprofitable Inadequate support cause products/services to fail Customer satisfaction suffers from poor quality Lack of training causes misuse of company assets		
Fina	ncial	Hazard			
•	Inadequate cash flow to support daily operations Inflation causes cost increases Large capital investments cause cash strain Inadequate capital investments restrain future growth	•	Lawsuits arising from injury to third parties on premises or in the course of operation of the business Lawsuits arising from defective products Lawsuits arising from contract disputes Lawsuits arising from infringement of copyrights or patents		

SIC Codes:

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	7370	Computer Programming, Data Processing, And Other Computer Related Svcs
	7371	Computer Programming Services
	7373	Computer Integrated Systems Design
	7378	Computer Maintenance And Repair
	7379	Computer Related Services, Nec



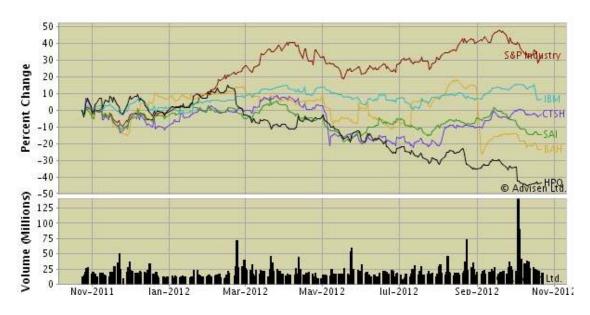


Competitors

Top 10 U.S. Companies Sorted by Sales

Ticker	Company Name	Market Cap (in Millions)	Sales (in Millions)	Employees	Sales Per Employee	Net Income	Price Earnings Ratio
HPQ	Hewlett-Packard Company	28,922.23	127,245.00	349,600	363,973.11	7,074.00	-5.20
IBM	International Business Machines Corp.	219,672.00	106,916.00	433,362	246,712.90	15,855.00	13.95
SAI	SAIC Inc.	3,741.48	10,997.00	41,000	268,219.51	59.00	-121.56
CTSH	Cognizant Technology Solutions Corporation	20,890.78	6,127.93	137,700	44,502.03	883.62	22.02
ВАН	Booz Allen Hamilton Holding Corp	1,649.80	5,854.74	24,950	234,658.91	239.96	6.51
UIS	Unisys Corporation	913.12	3,853.80	22,700	169,770.92	134.00	3.88
CERN	Cerner Corporation	11,843.81	2,203.15	9,900	222,540.70	306.63	32.95
IT	Gartner Inc	4,212.22	1,468.59	4,975	295,193.56	136.90	28.01
SAPE	Sapient Corporation	1,424.53	1,062.20	9,950	106,754.17	73.62	19.87
CBR	CIBER Inc.	223.05	990.33	6,500	152,357.84	-67.26	50.83

Stock and Financial Performance Trends







IT Consulting and Services Income Statement

	Hewlett- Packard Company	International Business Machines Corp.	SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry
Most Recent Quarter Date	7/31/12	6/30/12	7/31/12	6/30/12	6/30/12	6/30/12
Sales	\$29,669.00M	\$25,783.00M	\$2,848.00M	\$1,797.05M	\$1,432.42M	\$54.02M
Cost of Goods Sold	\$21,882.00M	\$12,194.00M	\$2,476.00M	\$1,030.89M	\$1,105.83M	\$29.68M
Selling, General and Administrative Expense	\$4,220.00M	\$7,418.00M	\$153M	\$396.77M	\$193.36M	\$13.13M
Operating Income Before Depreciation	\$3,567.00M	\$6,171.00M	\$219M	\$369.39M	\$133.24M	\$11.22M
Depreciation and Amortization	\$1,306.00M	\$1,176.00M	\$28M	\$37.43M	\$18.5M	\$2.03M
Operating Income After Depreciation	\$2,261.00M	\$4,995.00M	\$191M	\$331.96M	\$114.74M	\$9.43M
Interest Expense	\$230M	\$254M	\$24M		\$11.25M	\$0.4M
Non-operating Income (Expense)	\$6M	\$425M	\$6M	\$3.13M	\$(0.48)M	\$0.58M
Special items	\$(11,094.00)M	\$(7)M				\$(0.26)M
Pretax Income	\$(9,057.00)M	\$5,159.00M	\$173M	\$335.09M	\$103.01M	\$9.35M
Income Taxes - Total	\$(200)M	\$1,279.00M	\$63M	\$83.16M	\$41.06M	\$2.44M
Minority Interest		\$(2)M				\$0.09M
Income Before Extraordinary Items	\$(8,857.00)M	\$3,882.00M	\$110M	\$251.93M	\$61.94M	\$6.82M
Dividends - Preferred						\$0.01M
Income Before Extraordinary Items - Available for Common	\$(8,857.00)M	\$3,882.00M	\$110M	\$251.93M	\$61.94M	\$6.81M
Common Stock Equivalents - Dollar Savings			\$(2)M			
Income Before Extraordinary Items - Adjusted for Common Stock Equivalents	\$(8,857.00)M	\$3,882.00M	\$108M	\$251.93M	\$61.94M	\$6.81M
Net Income (Loss)	\$(8,857.00)M	\$3,882.00M	\$110M	\$251.93M	\$61.94M	\$6.82M



IT Consulting and Services Balance Sheet

	Hewlett- Interna Packard Mach Company Co		SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry
Most Recent Quarter Date	7/31/12	6/30/12	7/31/12	6/30/12	6/30/12	6/30/12
Assets						
Cash and Short Term Investments	\$9,509.00M	\$11,187.00M	\$756M	\$2,346.14M	\$336.05M	\$28.55M
Accounts Receivable/ Debtors-Total	\$18,802.00M	\$26,856.00M	\$1,992.00M	\$1,503.89M	\$1,070.78M	\$49.12M
Inventories – Total	\$7,292.00M	\$2,758.00M				\$3.74M
Current Assets – Other – Total	\$14,634.00M	\$6,591.00M	\$430M	\$302.32M	\$66.32M	\$11.74M
Current Assets – Total	\$50,237.00M	\$47,392.00M	\$3,178.00M	\$4,152.35M	\$1,473.14M	\$93.15M
Property, Plant and Equipment – Total (Net)	\$12,069.00M	\$13,865.00M	\$324M	\$837.68M	\$178.87M	\$21.77M
Intangible Assets – Total						
Assets – Other – Total	\$55,250.00M	\$52,575.00M	\$2,078.00M	\$664.18M	\$1,457.01M	\$84.37M
Assets – Total	\$117,556.00M	\$113,832.00M	\$5,580.00M	\$5,654.22M	\$3,109.02M	\$199.23M
Liabilities and Net	Worth					
Debt in Current Liabilities – Total	\$5,681.00M	\$7,669.00M	\$3M		\$45.62M	\$10.29M
Current Liabilities – Other	\$25,972.00M	\$21,569.00M	\$473M	\$1,013.31M	\$391.8M	\$41.78M
Current Liabilities – Total	\$44,919.00M	\$38,903.00M	\$1,781.00M	\$1,151.10M	\$878.25M	\$68.85M
Long-Term Debt – Total	\$24,063.00M	\$24,766.00M	\$1,297.00M		\$909.45M	\$36.5M
Long-Term Debt Due in One Year						
Account Payable/Creditors - Trade	\$12,554.00M	\$7,482.00M	\$1,296.00M	\$104.41M	\$440.82M	\$13.4M
Deferred Taxes – Balance Sheet				\$3.07M		\$0.44M
Liabilities – Other	\$16,564.00M	\$29,600.00M	\$143M	\$407.72M	\$301.47M	\$44.69M
Income Taxes Payable	\$712M	\$2,183.00M	\$9M	\$33.37M		\$3.38M
Liabilities – Total	\$85,546.00M	\$93,269.00M	\$3,221.00M	\$1,561.89M	\$2,089.17M	\$151.28M
Minority Interest						\$0.04M
Preferred/Preferen ce Stock (Capital) – Total						\$0.25M
Common/Ordinary Equity – Total	\$31,601.00M	\$20,472.00M	\$2,359.00M	\$4,092.33M	\$1,019.85M	\$47.7M
Common/Ordinary Stock (Capital)	\$20M	\$439M		\$2.99M	\$1.34M	\$1.13M
Treasury Stock – Total (All Capital)		\$117,116.00M			\$5.38M	\$165.29M
Capital Surplus/Share Premium Reserve	\$6,478.00M	\$48,719.00M	\$2,064.00M	\$407.97M	\$881.82M	\$73.7M
Retained Earnings	\$25,103.00M	\$88,430.00M	\$295M	\$3,681.37M	\$142.07M	\$138.16M
Shareholders Equity – Total	\$31,601.00M	\$20,472.00M	\$2,359.00M	\$4,092.33M	\$1,019.85M	\$47.95M





IT Consulting and Services Cash Flow

	Hewlett- Packard Company	International Business Machines Corp.	SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry		
Most Recent Annual Rate	10/31/11	12/31/11	1/31/12	12/31/11	3/31/12	12/31/11		
Operating Activ	ities (Indirect)							
Depreciation and Amortization	\$4,984.00M	\$4,815.00M	\$114M	\$124.18M	\$79.99M	\$7.52M		
Operating Activities - Net Cash Flow	\$12,639.00M	\$19,847.00M	\$710M	\$875.15M	\$360.05M	\$33.49M		
Investing Activi	ties							
Investing Activities - Net Cash Flow	\$(13,959.00)M	\$(4,396.00)M	\$(37)M	\$(850.28)M	\$(53.59)M	\$(10.5)M		
Capital Expenditures	\$4,539.00M	\$4,108.00M	\$65M	\$288.22M	\$76.92M	\$6.69M		
Financing Activ	Financing Activities							
Cash Dividends (Cash Flow)	\$844M	\$3,473.00M			\$11.91M	\$5.42M		
Financing Activities - Net Cash Flow	\$(1,566.00)M	\$(13,696.00)M	\$(449)M	\$(255.46)M	\$(14.72)M	\$(20.76)M		

IT Consulting and Services Financial Ratio Comparisons

Valuation Ratios	Valuation Ratios							
	Hewlett- Packard Company	International Business Machines Corp.	SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry		
Price to Earnings (TTM)	-5.2	13.95	-121.56	22.02	6.51	15.29		
Price to Sales (TTM)	0.24	2.07	0.33	3.08	0.28	1.92		
Profitability Ratio	os(%)							
	Hewlett- Packard Company	International Business Machines Corp.	SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry		
Operating Margin (TTM)	7.62	19.37	6.71	18.47	8.01	17.45		
Operating Margin (TTM) 3 Year Avg.	8.72	18.83	7.91	18.41	7.13			
EBITDA Margin (TTM)	12.02	23.93	7.69	20.56	9.3	21.17		
EBITDA Margin (TTM) 3 Year Avg.	12.81	23.52	8.92	20.53	8.46	20.94		
Pretax Margin (TTM)	-30.53	20.01	6.07	18.65	7.19	16.94		
Pretax Margin (TTM) 3 Year Avg.	-5.24	19.2	7.48	18.7	5.56	16.99		
Effective Tax Rate (Annual)	2.21	24.79	36.42	24.82	39.86	24.96		
Effective Tax Rate (Annual) 3 Year Avg.	19.88	25.07	43.83	19.84	32.8	26.32		





IT Consulting and Services Financial Ratio Comparisons (cont'd)

Management Effe	ectiveness Ratios					
•	Hewlett- Packard Company	International Business Machines Corp.	SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry
Return on Assets	-4.58	14.32	-0.39	18.22	8.17	13.66
Return on Assets (3 Year Avg.)	3.51	14.01	6.43	18.68	2.72	
Return on Equity	-15.78	74.67	-0.96	23.94	25.15	55.25
Return on Equity (3 Year Avg.)						44.41
Coverage & Leve	erage Ratio					
	Hewlett- Packard Company	International Business Machines Corp.	SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry
Times Interest earned (TTM)	9.83	19.67	7.96		10.2	22.31
EBITDA/ Interest(TTM)	15.51	24.3	9.13		11.85	26.75
EBITDA - Capex/ Interest (TTM)	3.19	15.89	7.75		11.49	22.52
Debt to Capital (MRQ)	0.48	0.61	0.36		0.48	0.54
Debt to Equity (MRQ)	0.94	1.58	0.55		0.94	0.98
Debt (avg. 12 mos.) to EBITDA (TTM)	1.93	1.2	1.65		1.98	1.04
Free CF (TTM) to Total Debt (avg. 12 mos.)	13.35	39.74	13.2		9.72	0.58
Liquidity & Activ	ity Ratios					
	Hewlett- Packard Company	International Business Machines Corp.	SAIC Inc.	Cognizant Technology Solutions Corporation	Booz Allen Hamilton Holding Corp	Average Industry
Current Ratio (MRQ)	1.12	1.22	1.78	3.61	1.68	1.35
Quick Ratio (MRQ)	0.63	0.98	1.54	3.34	1.6	1.12
AR Turnover (MRQ)	6.11	3.99	5.51	4.96	5.43	4.51
Inventory Turnover	12.34	18.93				30.93
AP Turnover	6.72	6.91	7.81	40.43	10.46	9.39





MSCAd Industry Large Losses

Advisen's Master Significant Case & Action database (MSCAd) compiles details and statistics on significant large losses, including management liability cases such as securities class actions, auditing and other management malpractice, state and federal government regulatory fines, employment liability cases and errors and omissions litigation. This also includes EEOC settled litigation, ERISA/Fiduciary Duty, Malpractice, Anti-Trust, Fraud, Trade Practices, and Contract Cases.

MSCAd is the most comprehensive, accurate source of this data available to the industry. Our information is compiled by a dedicated research team using numerous sources such as Stanford Securities, Federal agencies such as the Department of Justice, the EEOC, and the Securities & Exchange Commission, research tools such as LEXIS/NEXIS, major law firms and claims administrators, State insurance commissioners and attorneys general, and other sources. The consolidated data is subject to ongoing review and rigorous audit procedures to ensure both accuracy and timeliness.

Cases Filtered For:				
Industry Filters				
Dates:	2012,2011,2010,2009,2008			
Case Count:	101			

MSCAd Large Losses - 5 Year Trend





MSCAd Large Losses - Case Category Breakdown

MSCAd Large Losses - Line of Business







MSCAd Large Losses - Recent 10 cases

Case ID	Company Name	Company ID	Category/Type	Accident Date	Filing Date	Status	Total Amount(\$)
697551	Hewlett-Packard Company	1010941	Intellectual Property/Patent Infringement	10/07/2012	10/07/2012	Pending	
697652	SoftLayer Technologies, Inc.	13174450	Intellectual Property/Copy Infringement	09/26/2012	09/26/2012	Pending	
693275	Mitchell Kelly Group Inc	2579439	Employment/Wage and Hour	03/01/2011	08/06/2012	Pending	
696957	Hewlett-Packard Company	1010941	Products/Product Usage		05/09/2012	Pending	
693627	International Business Machines Corp.	1000680	Intellectual Property/Patent Infringement		04/27/2012	Pending	
683356	SAIC, Inc.	6691368	Securities/Securities Class Action		04/16/2012	Dismissed	
691372	Hewlett-Packard Company	1010941	Intellectual Property/Patent Infringement		04/13/2012	Pending	
689412	Five9, Inc.	2654346	Intellectual Property/Patent Infringement		04/03/2012	Pending	
689560	International Business Machines Corp.	1000680	Intellectual Property/Patent Infringement		03/22/2012	Pending	
687823	Hewlett-Packard Company	1010941	Intellectual Property/Patent Infringement		03/22/2012	Pending	

MSCAd Large Losses – Top 10 by Settlement Amount (\$)

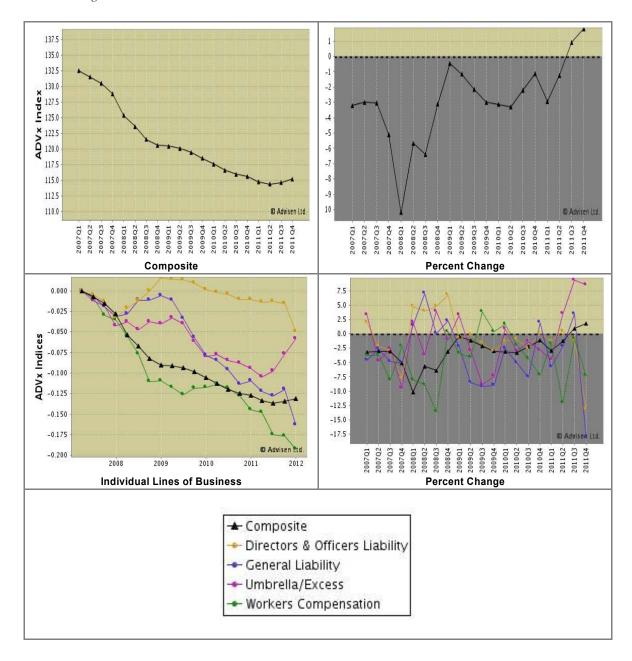
Case ID	Company Name	Company ID	Category/Type	Accident Date	Filing Date	Status	Total Amount(\$)
682053	SAIC, Inc.	6691368	Business & Trade Practices/Fraudulent Trade Practices		03/14/2012	Settled	500,392,977
686846	CALNET, Inc.	2908278	Business & Trade Practices/Billing Fraud		08/21/2009	Settled	18,100,000
684146	Hewlett- Packard Company	1010941	Business & Trade Practices/Fraudulent Trade Practices		11/10/2010	Settled	16,250,000
690264	Dynamics Research Corp	1000031	Business & Trade Practices/Breach of Contract		08/13/2009	Settled	15,000,000
654624	International Business Machines Corp.	1000680	Securities/Foreign Corrupt Practices Act (SEC)		03/18/2011	Proposed Settlement	10,000,000
684362	lif Data Solutions, Inc.	2345826	Business & Trade Practices/Billing Fraud		05/09/2008	Settled	8,900,000
634548	International Business Machines Corporation	1000680	Employment/Wage and Hour	4/1/05	04/17/2008	Settled	7,500,000
680114	Medidata Solutions Inc	1474107	Business & Trade Practices/Breach of Contract		06/18/2009	Settled	6,300,000
625696	Automated Trading Desk Holdings Inc	1090717	Securities/Securities Fraud		03/04/2009	Settled	5,000,000
640388	Smartsoft International, Inc.	2904268	Employment/Wage and Hour	1/1/09	08/17/2009	Settled	1,000,000





Insurance Program Pricing

ADVx tracks changes in average premiums paid upon the renewal of commercial lines insurance policies. The index is the composite of four lines of business: domestic property, general liability, workers compensation and directors & officers liability, weighted by their relative premium volume as reported in Best's Aggregates and Averages. Premiums are adjusted to 2000 dollar value. Policy renewal data are collected and compiled by Advisen from retail and wholesale insurance brokers and risk managers.







Recent Industry News of Top 5 Competitors

General Motors Co and Hewlett-Packard Co Team Up On IT Transformation

2012-10-18

General Motors Co and Hewlett-Packard Co announced a new multi-vear project services and software contracts that will accelerate GM's ongoing IT transformation efforts and deliver seamless, global services and products throughout the automaker's operations. These agreements provide GM a cost-neutral solution in which 3,000 HP employees already working on GM's business will transition to the auto company's employment rolls.

Hewlett-Packard Co Issues FY 2013 EPS Guidance

2012-10-17

Hewlett-Packard Co announced that for fiscal 2013, it expects non-GAAP diluted earnings per share to be in the range of \$3.40 to \$3.60 and GAAP diluted EPS for fiscal 2013 to be in the range of \$2.10 to \$2.30.

Belgian Bank Selects Hewlett-Packard Co's Autonomy Scrittura For End-To-End Post-Trade Management 2012-10-17

Autonomy, an Hewlett-Packard Co, announced that Belfius, a banking and insurance institution based in Belgium, has selected Autonomy Scrittura to provide an end-to-end platform for post-trade automation.

International Business Machines Corp Reiterates FY 2012 EPS Guidance-Reuters 2012-10-16

Reuters reported that International Business Machines Corp reiterated its outlook for fiscal 2012, targeting earnings per share (EPS) of at least \$15.10. According to I/B/E/S Estimates, analysts are expecting the Company to report EPS of \$15.15 for fiscal 2012.

International Business Machines Corp Expands Operations In Brazil With Three New Branches

International Business Machines Corp announced the opening of three new branches across Brazil as the company extends its push into underserved territories in emerging markets and increases its support for clients and partners. With the new offices in the cities of Joinville, Natal and Sao Luis, IBM has increased it to over 30 Brazilian branches.

International Business Machines Corp Opens Three New Branches In ASEAN 2012-10-09

International Business Machines Corp announced the opening of three new branch offices in ASEAN as it progresses a business expansion strategy. The new branches, located in the cities of Ipoh and Malacca in Malaysia and Bandung in Indonesia.

Saic Inc Receives \$152 Million Task Order By U.S. Army Aviation and Missile Life Cycle Management Command

Saic Inc announced that it was awarded a task order by the U.S. Army Aviation and Missile Life Cycle Management Command (AMCOM) to provide information technology (IT) support services to AMCOM and tenants at Redstone Arsenal. The task order has a thirty seven month period of performance and a total contract value of approximately \$152 million. The task order was awarded under the Information Technology Enterprise Solutions-2 contract vehicle. Work will be performed primarily in Huntsville, Ala.





IT Consulting and Services - Q4 2012

Saic Inc Secures \$18 Million Task Order From Defense Information Systems Agency 2012-10-17

Saic Inc announced that it was recently awarded a task order by the Defense Information Systems Agency (DISA) to provide strategic command, control and communications (C3) system engineering and technical services in support of the Nuclear C3 System. The single-award cost-plus award-fee (CPAF) contract has a one-year base period of performance, four one-year options and a total contract value of approximately \$18 million if all options are exercised. Work will be performed primarily at Fort Meade, Md. The task order was awarded under DISA's ENCORE II contract. DISA provides, operates and assures command and control, information sharing capabilities and a globally accessible enterprise information infrastructure in direct support to joint war fighters, national level leaders and other mission and coalition partners across the full spectrum of operations. Under the contract, SAIC will provide strategic C3 system engineering and technical services, including in-depth system engineering, systems analysis, vulnerability analysis, program and budget analysis and technical analysis regarding the Nuclear C3 System. Work will focus on engineering, analysis and documentation of both current and future objective architectures, as well as alternative architecture and roadmap development for evolving the Nuclear C3 System.

Saic Inc Receives Contract By U.S. Navy Space And Naval Warfare Systems Center Pacific 2012-10-08

Saic Inc announced that it has been awarded a prime contract by the U.S. Navy Space and Naval Warfare Systems Center Pacific (SSC Pacific) to provide In-Service Engineering Agent (ISEA) functions support services. The single award indefinite delivery/indefinite-quantity (IDIQ) contract has a one year base period of performance, two one year options, and a total contract value of approximately \$56 million, if all options are exercised. Work will be performed primarily in San Diego, Calif.

Cognizant Technology Solutions Corp and Monitise Plc form Mobile Money Alliance to Help Global Financial Institutions Capitalize on Mobile Money Opportunity

2012-10-04

Cognizant Technology Solutions Corp and Monitise Plc announced a global alliance that will help financial institutions embrace the mobile channel of interaction, and develop effective and mobile banking, payments, and commerce solutions. Combining Cognizant's financial services and mobility expertise with Monitise's mobile money platform, the alliance will help global financial institutions speedily respond to the mobile money opportunity that is gathering momentum.

Cognizant Technology Solutions Corp. Issues Q3 2012 Guidance; Reaffirms FY 2012 Revenue Guidance; Raises FY 2012 EPS Guidance

2012-08-06

Cognizant Technology Solutions Corp. announced that for third quarter of 2012, it expects revenue to be at least \$1.875 billion and diluted earnings per share (EPS) is expected to be \$0.86 on a GAAP basis and \$0.92 on a non-GAAP basis, which excludes estimated stock-based compensation expense. The Company also announced that for fiscal 2012, it expects revenue to be at least \$7.34 billion, up at least 20% compared to 2011 and diluted EPS to be at least \$3.38 on a GAAP basis, and \$3.64 on a non-GAAP basis, which excludes estimated stock-based compensation expense. EPS guidance excludes any future non-operating foreign currency exchange gain or loss. According to I/B/E/S Estimates, analysts' on an average were expecting the Company to report revenue of \$1.879 billion and EPS of \$0.86 for third quarter 2012; revenue of \$7.34 billion and EPS of \$3.37 for fiscal 2012.

${\it Cognizant Technology Solutions Corp. Selected By Philips To Provide Comprehensive Business Transformation Services Globally To Increase Business Agility And Competitiveness \\ 2012-07-24$

Cognizant Technology Solutions Corp. announced that it has been selected by Royal Philips Electronics, a global leader in healthcare, lighting, and consumer lifestyle solutions, as a strategic partner to drive a broad range of technology-enabled business transformation and growth programs. Under the terms of the multiyear engagement, Cognizant will provide a comprehensive range of consulting and application services globally to help Philips consolidate, rationalize, and enhance its IT landscape for improved operational efficiency, business agility, and governance to deliver superior customer service. Cognizant's engagement will enable Philips to transition the IT organization to a platform and output-based managed services model across multiple business lines and corporate functions, thereby enabling Philips to variablize its cost structure, drive structural savings, and free up resources to create higher value business capabilities. Financial details of the deal were not disclosed. In harmonizing and supporting business processes with scalable, business-aligned technology platforms, Cognizant will help Philips improve the business value of IT, obtain deeper visibility into its demand chain, and respond more effectively to the needs of its markets, businesses, and functions.





IT Consulting and Services - Q4 2012

Booz Allen Hamilton Holding Corp Secures Eight Major Task Orders To Support the National Geospatial Intelligence Agency

2012-10-18

Booz Allen Hamilton Holding Corp announced that it has won eight task orders to provide management and technical services to the National Geospatial-Intelligence Agency (NGA) through the Enterprise Support to Management and Resources for Technical Services (ESMARTS) contract. ESMARTS is an Indefinite Delivery Indefinite Quantity (IDIQ) contract with a maximum value of \$873 million, and will provide services to NGA through December 2016. Booz Allen provided similar support to NGA under the predecessor SMARTS contract initiated in 2006. Booz Allen will help implement NGA's strategic initiatives regarding: content, customer service, open information technology environment, analytic capabilities, workforce, workplace and functional management.

Booz Allen Hamilton Holding Corp Announces To Acquire Defense Engineering Services Division Of ARINC 2012-10-16

Booz Allen Hamilton Holding Corp announced that it has entered into a definitive agreement to acquire the Defense Systems Engineering & Support (DSES) division of ARINC, based in Annapolis, MD with offices across the United States. DSES brings capabilities in advanced aviation and maritime engineering, advanced weapons modernization and sustainment, and advanced systems engineering and integration to complement Booz Allen's existing service base, which spans engineering and operations, technology, analytics, and strategy and organization. DSES is well-positioned in the growing command, control, communications, computing, intelligence, surveillance, and reconnaissance (C4ISR) and engineering services/prototyping segments of the defense market, and Booz Allen sees opportunities for DSES' capabilities in adjacent intelligence, law enforcement, homeland security, and international systems sectors.

Booz Allen Hamilton Holding Corp Amends Record Date For Special Dividend $2012\hbox{-}08\hbox{-}03$

Booz Allen Hamilton Holding Corp announced on August 1, 2012 that its Board of Directors had authorized and declared a regular cash dividend in the amount of \$0.09 per share and a special cash dividend in the amount of \$6.50 per share, both payable on August 31, 2012. The record date for the regular cash dividend remains August 14, 2012 as previously announced. The Company is changing the record date for its previously announced special cash dividend from August 13, 2012 to August 15, 2012.



