

**Cloud Computing Stack Layers – IaaS, PaaS, SaaS Market  
Strategies, Shares, and Forecasts, Worldwide, 2010-2016**

**Cloud Computing Systems Provide: IT Efficiency --  
Capacity on Demand**



*Picture by Susie Eustis*

**MOUNTAINS OF OPPORTUNITY**

***OPPORTUNITY ABOUNDS***

**WinterGreen Research, Inc.**

**Lexington, Massachusetts**

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Platform as a Service  
Infrastructure as a Service  
.NET  
Agile Development  
Cloud Computing  
Enterprise Java  
Hardware Infrastructure  
IT Management  
IT Service Management  
ITIL  
Internet  
Microsoft Live  
Open Source  
SOA  
SOA Governance  
SOA architect  
SaaS  
Cloud Security  
Software Development  
Software Infrastructure  
Virtualization  
Web Technology  
Windows  
Business Intelligence  
Cloud datacenters  
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Cloud Systems Management  
Information Technology  
Cloud Computing  
Virtualization  
Security  
Cloud Hardware...  
Cloud Based Collaboration  
Cloud Broadband  
Cloud Computing Telepresence  
Cloud Computing Security  
Cloud Data Center  
Cloud Systems Management  
Cloud Storage Systems

Cloud Computing Layers: SaaS, IaaS, PaaS

Web Services

Enterprise CMS

Enterprise SaaS

Google apps

Hosted cms

Hosted SaaS

SaaS trends

Web cms

Zoho

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## **Cloud Computing Stack Layers – IaaS, PaaS, SaaS Market Strategies, Shares, and Forecasts, Worldwide, 2010-2016**

LEXINGTON, Massachusetts (March 14, 2010) – WinterGreen Research announces that it has a new study on: Cloud Stack Layers – IaaS, PaaS, SaaS: Market Shares and Forecasts, Worldwide, 2010-2016.

IBM is the market leader in SOA Platform as a Service (PaaS) with 73% market share. Oracle / BEA /Sun participate in the market with 6% share, Microsoft with 5% share in 2009. Salesforce.com is the leader in virtualized software systems with 50% share in the CRM SaaS software as a service market. Different companies are leaders in different segments.

Applications and infrastructure markets come together to make information technology delivery a utility. On demand systems scale to meet the needs of users and users only pay for the capacity they use. Strategies relate to different ways to position software, hardware and services for the most effective product set. The 2010 study has 737 pages, 206 tables and figures.

The popularity of the on-demand deployment model has increased significantly. Systems provide security, response time, and service availability. SaaS software as a service application is widely known by the salesforce.com computing model illustrates. Business applications and computing models have matured and adoption has become an issue for every IT department. Platform as a service (PaaS) and infrastructure as a service (IaaS) have joined SaaS as compelling aspects of cloud computing applications and infrastructure services.

An organization's application development team and the application portfolio need to be managed as a piecemeal part of the IT infrastructure. It is generally managed on an application by application basis. Applications represent a major source of IT value and are a large IT cost component.

The major management objectives for this critical area of applications implementation include improving service-oriented architecture (SOA) adoption, increasing Software

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**Development Life Cycle (SDLC) efficiency, improving cost management, and reducing ineffective spending.**

**The fundamental aspect of applications implementation relates to flexibility. The ability to be responsive to changing market conditions is central to the modern IT management task and the desire for systems that support that is anticipated to spur rapid growth of cloud computing. SOA services oriented architecture forms the base for achieving that capability.**

**Cloud Stack Layers – IaaS, PaaS, and SaaS are disruptive IT technology. Cloud markets are poised to get very big. At \$20.3 billion in 2009 cloud computing markets are anticipated to reach \$100.4 billion by 2016. Market growth comes because the technology has caught the imagination of IT managers, on demand computing seems to work, virtualization works, and the utility industry model is now applicable to IT. As IBM and others built out software that integrates across open systems, the cloud computing markets are enabled.**

**The cloud computing technology works, its benefits have a positive ROI over the useful life of the servers, even a significant payback. The software systems are integrated, automated process is at the cusp of significant shifts in compute capacity delivery. Cloud computing is a disruptive technology. On demand cloud computing provides the cheap, easy to use, dependable computing hardware and software services model needed to drive industrial growth.**

Keywords:, cloud computing, cloud hardware infrastructure, IBM, IT Management, IT Service Management, ITIL, System z, SaaS, PaaS, IaaS, Internet, Microsoft, Microsoft Live, Open Source, SOA, SOA Governance, SOA architect, SaaS, Security, Software Development, Software Infrastructure, Virtualization, Web Technology, Windows, business intelligence, datacenters, governance, management, Information Technology, Cloud Computing, Cloud Based Collaboration, Cloud computing telepresence, Online meetings, cloud stack layers, wintergreenresearch.com.  
<http://wintergreenresearch.com/reports/cloudSaaS.html>

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**Companies Profiled**

**Market Leaders**

IBM  
Google  
Adobe Systems  
Salesforce.com  
BMC  
EMC  
Hewlett Packard (HP)  
Amazon  
Microsoft Dynamics GP  
Brocade  
Panda Security  
Cisco  
NetSuite  
Software AG  
AT&T  
Tibco  
Xerox  
CA / 3Tera  
Progress Software  
RedHat  
Yahoo

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**Cloud Computing Market Participants**

**Cloud Computing Company Profiles**

Akamai  
Areti Internet  
AppScale  
Ariba  
Axios  
Cassiopeia Internet / Constellate  
CDC Software  
Consona  
CrownePeak  
Dell  
Descartes  
Enki  
FedEx  
FrontRange Solutions  
Fortress ITX  
Fujitsu  
Inteq  
Joyent  
Juniper  
Ketera  
Layered Technologies  
Novell Interoperable Linux Cloud Platforms  
Omniture  
Oracle  
Rackspace  
RightNow Technologies  
Rightscale  
Sage Figures CRM into its Equation  
Savvis  
Service-now.com  
SugarCRM

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SumTotal  
Symantec  
Tenzing Cloud Computing Services  
Verizon  
Workday

## Cloud Computing Stack Layers – IaaS, PaaS, SaaS Market Strategies, Shares, And Forecasts, Worldwide, 2010 to 2016

### Report Methodology

This is the 438th report in a series of primary market research reports that provide forecasts in solar energy, robots, communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and batteries to store energy. Automated process and significant growth potential are a priorities in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on

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interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards. Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2009. With 2009 and several years prior to that as a baseline, market projections were developed for 2010 through 2016. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective. The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes referencde to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

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WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

## **Cloud Computing Stack Layers – IaaS, PaaS, SaaS: Market Shares and Forecasts, Worldwide, 2010-2016**

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