

Beyond the Storm – A New Hybrid Cloud Future Emerges

Frank P. Sempert Senior Program Executive, Europe Saugatuck Technology P +49 6123 630285 frank.sempert@saugatucktechnology.com



Key Trends – And the Evolution of Enterprise IT

• Cloud Computing is now THE dominant / global trend in Enterprise IT

- 65 percent or more of all NEW business application / solution decisions in the enterprise will be Cloud-based or Hybrid by YE2014 (up from 20 percent in '09). All customer segments are impacted.
- Key drivers today have shifted from "Better, faster and cheaper" to "Transforming the enterprise" especially for larger enterprises, while mid-market companies remain focused on cost savings.

The Master Brands are moving aggressively into Cloud

- Investments made by traditional Master Brands (MB) such as IBM, MSFT, ORCL, HP and SAP will begin to bear fruit 2011-12. Joining them as emerging Cloud MBs are Google, Salesforce, Amazon.
- 45-50 percent of ISVs have begun the move to the Cloud. PaaS, as a key enabler, has become a MB battleground. ISVs that do not invest by 2012, will become increasingly marginalized.

Customer demand for SaaS, PaaS and IaaS continues to evolve

- SaaS will remain the dominant Cloud delivery model through 2014, as enterprises of all shapes and sizes transition to a new way of managing their businesses and their application portfolios.
- BI joins CRM, Customer Svc., Collaboration & SFA at top of SaaS solution demand with growing interest in core operational systems (HR, Finance, Proc.); Supply Chain / ERP further out (2014-15).
- Through 2010, buyers have predominantly preferred best-of-breed SaaS solutions. However, through 2013 the market will begin to shift to platform-driven integration of SaaS and on-premise solutions, creating de-facto multi-vendor solution suites, in addition to single-vendor suites.
- By YE 2012, PaaS and IaaS evolve to make the Cloud a viable platform to develop and deploy new custom workloads (either to Public or Private Clouds).
- By 2012, fears associated with IaaS (standards, transaction/data/security integrity) are resolved, as firms realize value lies less with savings & more with agility (for LEs), & svc. levels/compliance (for SMBs).

• Interest in BPaaS emerges as the next major abstraction of Cloud IT

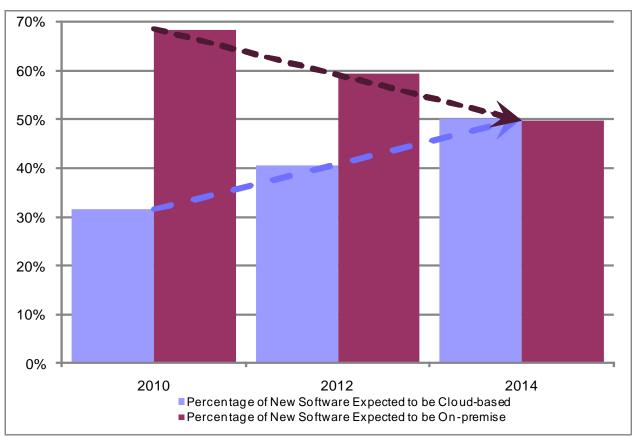
BPaaS evolves across three phases: 1) *Cloud-enabled BPO*: traditional infra/apps/business process outsourcing gets cloud-enabled; 2) *New BPO Services*: the Cloud creates new service opportunities (especially vertical), and 3) *Business Process Utilities*: BPUs emerge as the next-gen of services.
 Entire contents © 2010 Saugatuck Technology Inc.
 All rights reserved.



After the Storm – The Shift to the Cloud Accelerates

By YE 2014, 50 percent or more of NEW enterprise IT spend will be Cloud-based or Hybrid. By YE 2014, 65 percent or more of NEW enterprise IT workloads will be Cloud-based or Hybrid. By YE 2014, 25 percent or more of TOTAL enterprise IT workloads will be Cloud-based or

Hybrid.



Source: Saugatuck Technology Inc.

Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.



Saugatuck Cloud Ecosystem Model

Level 4: BPO / Managed

Services. Specialized expertise often delivered in conjunction with a Cloud-based solution, e.g., Mobility as a Service, Cloud-based security.

Level 3: SaaS (Waves I-III) and

related services. Business solutions delivered from the Cloud, typically in a multi-tenant architecture, and billed under subscription model.

Level 2: Cloud development, PaaS, SaaS integration, Service

Hubs, including billing, administration, aggregation, security and mobility solutions, systems and infrastructure management, data warehousing, data access and analysis, and related professional services.

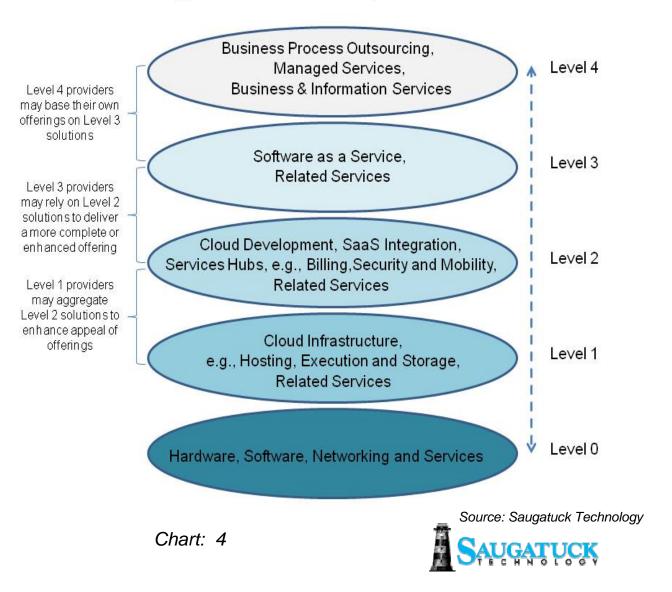
Level 1: Cloud-based On-Demand infrastructure

providers and platforms that host SaaS and other on-demand solutions and provide service offerings to manage infrastructure platforms (collocation);

Level 0: Suppliers of hardware, system software and utilities, data center management software, networking equipment, hardware and software, and associated services

Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.

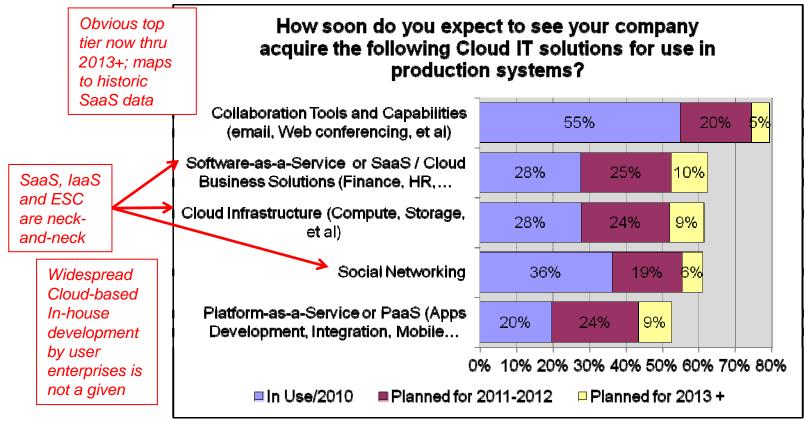
Saugatuck Cloud Ecosystem Model



Cloud IT Solutions in Production Systems: Today Through 2013

Through 2012, the combination of Collaboration and Social Networking tools will lead all forms of Cloud deployment.

Integration will remain the dominant form of Cloud Platform use through 2013, as 25 percent or more of Public and Private Cloud workloads are integrated with on-premise solutions, and Cloud-to-Cloud integration continues to increase.



Source: Saugatuck Technology Inc., 2010 Cloud IT Survey (September 2010), Global N=546

Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.

Page: 5



Cloud Business Solutions Go Mainstream

Globally, Business Intelligence now joins CRM, Customer Service, Collaboration and SFA as the leading Cloud Business Solutions in demand and deployed through 2012.

Cloud Business Solutions / SaaS – Installed Base + Purchase Intent Through 2012					
	Worldwide	US	Europe	AsiaPac	
Customer Relationship Mgmt.	1 (52%)	3	1 (t)	1 (t)	
Customer Service and Support	2 (51%)	4	5	4	
Collaboration	3 (51%)	(1)	4	(17)	
Business Intelligence	4 (50%)	2	9	7 (t)	
Salesforce Automation	5 (50%)	6	12	3	
Financial Analysis & Reporting	6 (49%)	9	8	1 (t)	
Planning & Budgeting	6 (49%)	7	(1 (t)	11	
E-Commerce	8 (49%)	5	11	9	
Human Resource Admin.	9 (48%)	(13)	3	7 (t)	
Payroll	10 (48%)	8	13	5	
Time and Labor Mgmt.	11 (47%)	11	10	19	
Benefits Admin.	12 (46%)	12	18	14 (t)	
Procurement	13 (46%)	10	22	20	
Supplier Relationship Mgmt.	14 (46%)	16	14	6	
Sourcing	15 (45%)	14	17	16	
Corp. Performance Mgmt.	16 (45%)	18	15	12	
Supply Chain	17 (45%)	19	6	14 (t)	
Core Financials	18 (45%)	17	16	13	
Talent & Performance Mgmt.	19 (44%)	15	20	18	
Governance, Risk & Compliance	20 (44%)	21	(7)	22	
Treasury & Cash Mgmt.	21 (43%)	20	19	(10)	
Product Lifecycle Mgmt.	22 (43%)	22	21	21	
ERP-Manufacturing	23 (36%)	23	23	23	

However when looking at buyer demand within a functional domain, the numbers tell a slightly different story:

Top Finance Solutions targeting Finance Execs:

Planning & Budgeting
Business Intelligence
Core Financials
Financial Analysis & Reporting
Governance, Risk & Compliance
Treasury / Cash Mgmt.

Top Human Capital Solutions targeting HR Execs:

•Payroll

- •Time & Labor Mgmt.
- •HR Administration
- •Talent & Performance Mgmt.
- •Benefits Administration

Top Procurement Solutions <u>targeting Purchasing/</u> Procurement Execs:

- •Sourcing
- •Supplier Relationship Mgmt.
- •Procurement

SAUGATUCK

Source: Saugatuck Technology Inc., 2010 Cloud Business Solutions / SaaS Survey (March 2010), US=362, Europe=223, Asia=161)

 $\label{eq:entropy} \mbox{Entire contents} @ 2010 \mbox{Saugatuck Technology Inc.} \\ \mbox{All rights reserved.} \\$

Cloud Business Solutions – Shift to "Core" Operational Systems

By 2014, spending on core / operationally-focused Cloud business solutions begins to rival – and in some segments overtake – front-office and tactical solution demand.

By 2014, three-to-four category leaders emerge for each of the major Cloud / SaaS business solution segments – more than half of which do not have a heritage as on-premise providers.

	2008	2010	2012	2014
Knowledge Worker Collaboration	Collaboration Early Cloud Market Leader Google, Cisco/Webex, IBM and others help make Cloud mainstream		Core Cloud Solution Master Brands migrate collaboration suites to the cloud, e.g., Microsoft – as collaboration is cloud category with some of the most significant rip & replace of traditional on-premise solutions	
Finance / Analytics/ Planning/ Budgeting	SMBs take leadLarge Enterprise early-adopteEarly leaders include NetSuite, Intacct, and regional playersLarge Enterprise early-adopte(Kyriba, Sabrix), along with		Traction ters begin to deploy. SAP along financial start-ups gain traction niche CPM / BI players (Host aptive Planning)	Becoming Core Single-vendor and de-facto platform-driven suites emerge
Sales / Marketing / Performance Mgmt.	CRM / SFA Early Cloud / SaaS Leaders Salesforce and others (e.g., Xactly, Callidus, RightNow, SugarCRM) help make SaaS mainstream, as well as a variety of niche players (e.g., Prolifiq)		Core Cloud Solution Beyond sales & marketing – becoming key solution around which small and large enterprises are adding complimentary offerings, especially finance	
Human Capital Management	Initially very tactical offerings. Early market leaders Taleo, Successfactors, ADP / Workday leading drive to ga		y - Talent Mgmt., HR/Benefits oor Mgmt. all "hot" segments – in traction in large enterprises, such as UK-based Patersons	Core Cloud Solution Becoming lead solution category for many large enterprise SaaS portfolios
Procurement / Expense Mgmt.	Emerging An emerging segment that plays naturally to Cloud / SaaS architecture. Concur early market leader.		Growing Nicely A variety of direct & indirect procurement and sourcing providers emerge, led by long-time market leader Ariba and smaller niche providers.	
Manufacturing / Supply Chain	Primarily Niche Deployments Interesting innovation – e.g., shop floor / production (Plex), MRP / discrete suite (NetSuite / Rootstock), transport / logistics (Descartes), fleet optimization (Xata), supplier compliance (Trace One) – but still early		While not typically an early-add than usual due to potential execution / col	erging opter segment, it may move faster cost savings and supply chain laboration needs Source: Saugatuck Technology

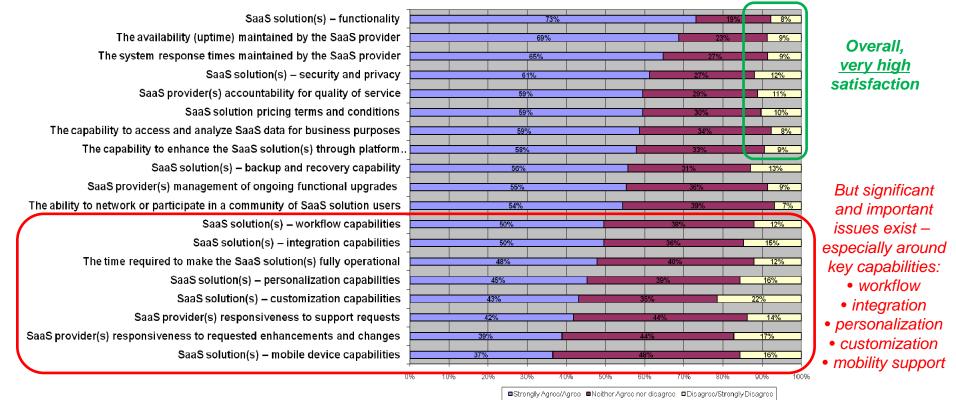
Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.



Cloud Satisfaction – Strong Today But Challenges Exist

Through 2014, Cloud satisfaction levels remain high, resulting in 90 percent plus average customer renewal rates, and 100 percent plus average contract value renewal rates. Through 2011, Cloud business solutions remain challenged to fully address large enterprise requirements related to key Wave II & Wave III capabilities – including workflow, data and process integration, personalization, customization and broad-based mobility support.

In Regard to Our Experience with Cloud Business Solutions (SaaS), My Company is Satisfied with . . .



Source: Saugatuck Technology Inc., 2010 Cloud Business Solutions / SaaS Survey (March 2010), Global N=790

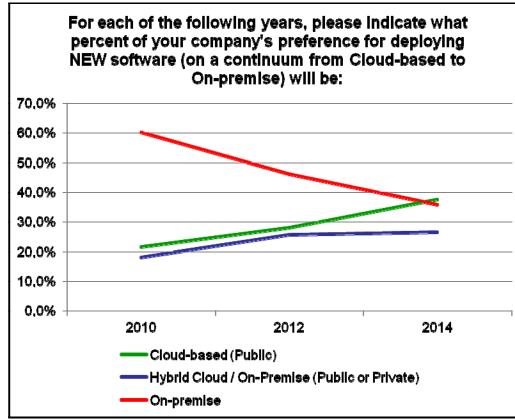
Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.



New Software Deployments: Pure Cloud vs. Hybrid vs. On-Prem

By 2014, the combination of new Public Clouds and Hybrid solutions make up more than 65 percent of new software deployments.

By 2014, up to 35 percent of the Hybrid solutions will be based on Public or Private Cloud deployments using Platform-as-a-Service.



But significant differences in adoption by size of company!

< 100 Employees	2010	2012	2014
Cloud-based (Public)	26.5%	34.5%	43.6%
Hybrid Cloud	17.7%	23.8%	22.5%
On-premise	55.7%	41.6%	33.9%

5,000 + Employees	2010	2012	2014
Cloud-based (Public)	17.0%	24.5%	34.6%
Hybrid Cloud	17.5%	24.7%	27.3%
On-premise	65.0%	50.8%	38.1%

Source: Saugatuck Technology Inc., 2010 Cloud IT Survey (September 2010), Global N=546

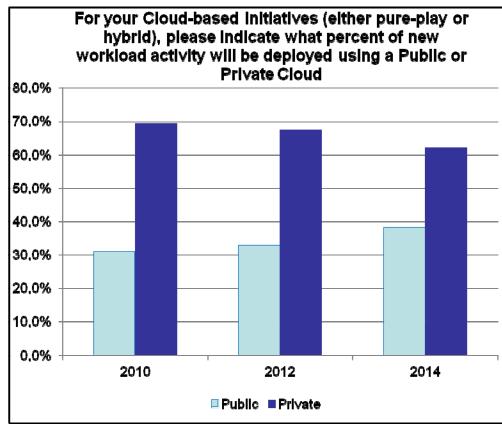
Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.



New Cloud Workloads: Public vs. Private Cloud Adoption

Through 2014, 60 percent or more of Private Clouds will focus on specific workloads such as analytics, social networking or applications development / test.

Through 2014, 70 percent of Private Cloud deployments will be packaged vendor offerings delivered as a drop-in appliance or as software to be deployed on customer infrastructure.



But significant differences in adoption by size of company!

< 100 Employees	2010	2012	2014
Public	47.6%	43.8%	46.3%
Private	52.4%	56.2%	53.8%

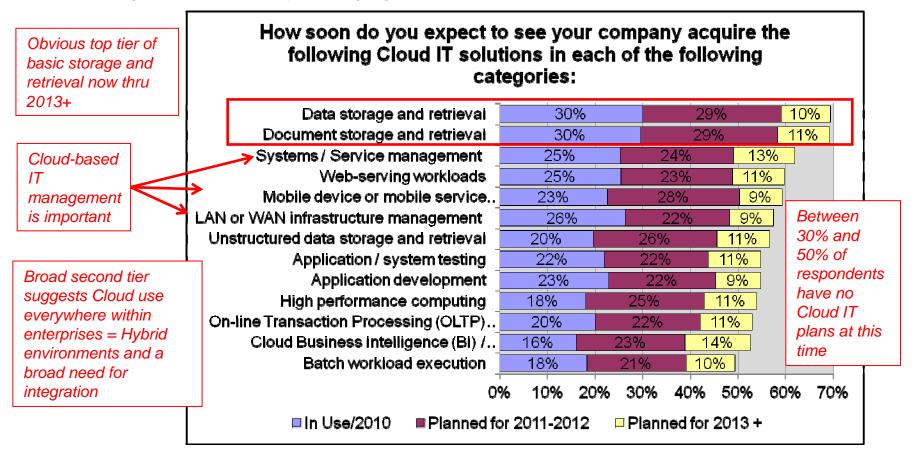
5,000 + Employees	2010	2012	2014
Public	21.2%	24.0%	30.3%
Private	78.8%	75.1%	69.7%

Source: Saugatuck Technology Inc., 2010 Cloud IT Survey (September 2010), Global N=546



Cloud IT Solution Types: Today Through 2013

Through 2014, Cloud Storage (including data and documents) tops the list of infrastructure solutions in demand, largely due to strong demand from departmental business use. Cloud-based IT Management, including service management, mobility support and LAN / WAN management, is quickly emerging to address a new set of enterprise IT requirements.



Source: Saugatuck Technology Inc., 2010 Cloud IT Survey (September 2010), Global N=546

Entire contents $\textcircled{\mbox{$\odot$}}$ 2010 Saugatuck Technology Inc. All rights reserved.

Page: 11



IaaS and Hosters / Telecoms

By YE2011, 30 percent of customers will actively begin transitioning existing workloads from traditional hosting offerings to Public and Private Cloud computing offerings.

By YE2014, over 60 percent of all customer external Cloud computing workloads will be operating on infrastructures owned by fewer than 20 providers (globally).

Through 2014, buyers will prefer focused hosters over Telecom providers (except in Europe & Asia), despite their having a strong foundation in Cloud-related services (i.e., billing, on-

boarding). Traditional Hosting	Related Cloud Offerings /	Pre-Requisites for Success	Considerations / Challenges	
Offerings	Opportunities			
Co- location	 Private Cloud Customer-owned & managed infrastructure located on provider premises 	 Enterprise-class physical site Affordable Private Network Strong Physical Site Mgmt. Skills 	 Need strong "back-office" processes (e.g., customer on-boarding) Natural opportunity for traditional hosters and telecoms 	
Managed Servers	 Private Cloud Provider-owned & managed infrastructure located on provider premises 	 Enterprise-class physical site Affordable private network Strong physical site mgmt. skills Strong infra. support skills Strong customer support skills 	 Need strong "front-office" processes (e.g., tech support, provisioning) Natural opportunity for trad. hosters Potential challenges for telecoms outside of network-centric offers 	
Shared Servers	 Public Cloud Provider-owned & managed infrastructure located on provider premises 	 Enterprise-class physical site Affordable private network Strong physical site mgmt. skills Strong infra. support skills Strong Cloud support skills Strong customer support skills 	 Need strong Cloud automation and mgmt. (e.g., rapid & dynamic provisioning, billing) Both opportunity and potential challenge for traditional hosters and telecoms 	

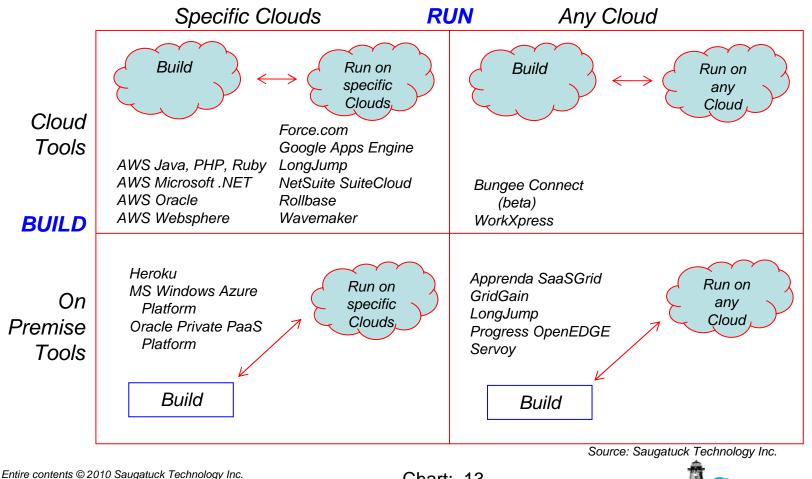
Source: Saugatuck Technology Inc.

Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.



Saugatuck's Platform-as-a-Service Taxonomy

Through 2013, 60 percent or more of PaaS development will remain on-premise based. By 2014, five dominant PaaS providers will capture 70 percent or more of Public and Private Cloud development.



All rights reserved.



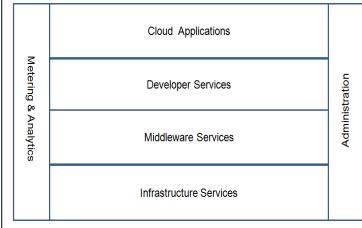
Platform-as-a-Service Heat Map

By 2012, all of the leading PaaS providers will move aggressively to mature their platforms to include certifications, built-in multi-tenant support and transparency into platform utilization. By 2014, all of the leading PaaS providers will offer completely automated dynamic scaling, a session monitoring console and a robust cloud-based test suite.

The Most Important PaaS B	uying Crite	eria – By	Region		PaaS? What distinguishes a Pa	
	North America	Europe	Asia	things th	ering? Is it simply ease of use?(nat a PaaS solution must have in iate itself from laaS? Should a Pa	
Backup and recovery	39%	35%	34%	permit o	r require deployment to an laaS	
Availability for a private Cloud	27%	23%	22%	producti	on execution?	
Reporting and analytics	27%	22%	33%	We prop	oosed that a PaaS should have:	
Service level agreements	24%	29%	26%			
Support for very large databases	18%	23%	14%		Cloud Applications	
Transparency into platform utilization	14%	18%	16%	-		
Workflow modeling and management capability	13%	21%	25%	Metering	Developer Services	
High volume storage (tables and BLOBs)	12%	15%	15%		Developer Services	
Cloud-based application development tools	11%	16%	13%	& An		
Automated, dynamic scaling	10%	14%	14%	Analytic	Middleware Services	
Certification (PCI, HIPAA, SAS70, FISMA, etc.)	9%	17%	12%	8		
Built-in multi-tenancy support	7%	13%	11%		Infrastructure Services	
Support for specific programming language		<u></u>	100/			
environments	6%	8%	12%	Our ator	k model includes Matering and	
Robust Cloud-based test suite	6%	5%	12%		ck model includes Metering and	
Fully-functional DBMS middleware	6%	7%	11%		and Administration, spanning and int other layers:	
Session monitoring console	3%	8%	7%			

The Meet Impertant Deep Duning Criteria Dy Dogion

S? What distinguishes a PaaS from an Is it simply ease of use? Or are there PaaS solution must have in order to self from laaS? Should a PaaS solution ire deployment to an laaS platform for ecution?



del includes Metering and Analytics ration, spanning and integrating all

Source: Saugatuck Technology Inc., 2010 Cloud IT Survey (September 2010), Global N=546 Entire contents © 2010 Saugatuck Technology Inc. Chart: 14 All rights reserved.



The Cloud and Business/IT Services

By 2015, 50 percent of new BPO deals are delivered as BPaaS (significantly cloud enabled). By 2013, "non-traditional" service providers with specific vertical and business IP will aggressively enter the BPaaS market. They will both partner and challenge traditional outsourcers with new Cloud-enabled business solutions and services.

By 2015, Business Process Utilities (BPU) emerge as the preferred means of consuming horizontal / commoditized BPO offerings (F&A, Procurement, HR) and select vertical opportunities (e.g., Navitaire / airline reservations).

Evolving Service Provider Dynamics

	Legacy Business Model (s)	Cloud Business Model (s)
Deal Type	Horizontal "Tower" Deals	Vertical Integrated Processes
Deal Length	Long term 5-10 years "Billion Dollar Diet"	Shorter / leaner / iterative relationships <3 years
Deal Focus	Asset intensive (transfer of capital and labor)	Asset Lite (leveraging external Cloud computing services)
Deal Team	Pyramid (partner approach)	Flatter (expert ninjas) from offshore centers of expertise
Deal Partner	Established ecosystem	New partners, co-opetition / competition
Deal Flow	US and W. EU	Global - growth especially from BRIC
Deal Scalability	One-to-one / "mess for less"	One-to-many (repeatable business solutions)

Ten Cloud Computing Concerns Shaping Service Provider Strategies

Cloud Computing abstracts functionality to business layer.
Cloud Computing challenges services providers to sell beyond IT.

IT service providers need to become more nimble / agile.
Cloud Computing breaks traditional service provider pricing models.

•Cloud IT consulting work will grow but not into the billions

•The army of consultants will continue to get smaller, leaner and more specialized.

•Traditional ISVs eventually shape up as services competitors.

•The SaaS explosion means a Hoster implosion [for those who do not adapt].

•Service Providers enter the software market.

•Cloud Assessments useful but in danger of adding complexity.

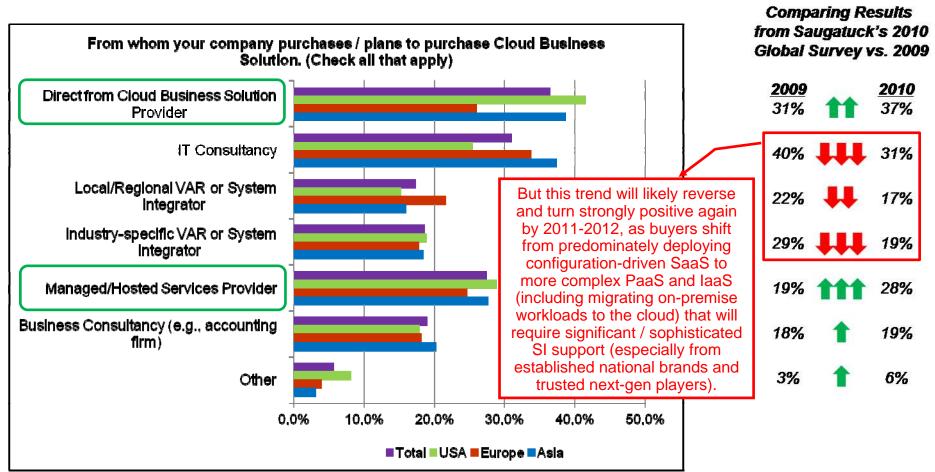
Source: Saugatuck Technology



Entire contents © 2010 Saugatuck Technology Inc. All rights reserved.

The Cloud, the Channel and Evolving Routes to Market

By 2014, the Cloud helps reshape 50 percent or more of traditional IT spend and channel relationships – with significant regional variations.

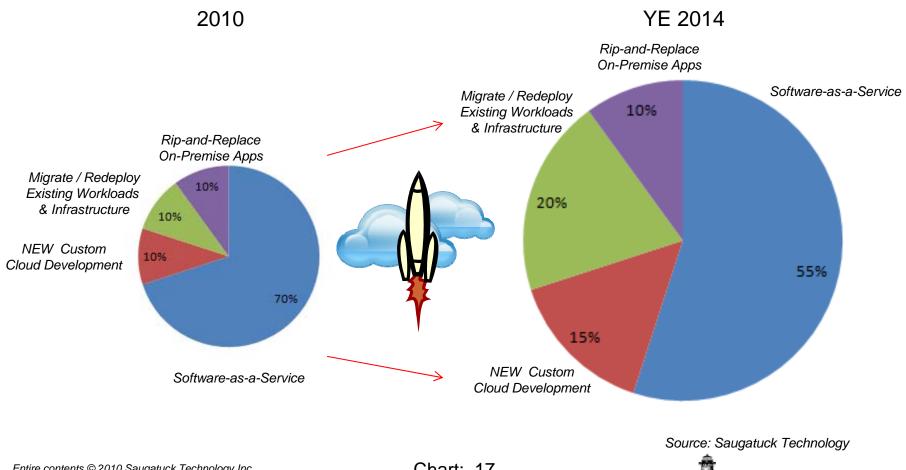


Source: Saugatuck Technology Inc., 2010 Cloud Business Solutions / SaaS Survey (March 2010), Global N=790



Best-Estimate Distribution of 2014 Cloud Workload Activity

By YE 2014, the largest driver of Cloud IT workloads will continued to Software-as-a-Service solutions, followed by the migration of on-premise applications and business productivity capabilities (including collaboration platforms and infrastructure).





How to Contact: Regional Sales Offices

US OFFICES

Headquarters

Saugatuck Technology Inc. 49 Riverside Ave. Westport, CT 06880 USA (P) +1.203.454.3900 Regional Sales: Al. Vanek@Saugatech.com

Silicon Valley

Saugatuck Technology Inc. 5201 Great America Parkway, Suite 320 Santa Clara, CA 95054 USA (P) +1.408.727.9700 Regional Sales: Andrew.Jeffs@Saugatech.com

INTERNATIONAL

Germany Saugatuck Technology Inc. Bluecherstr. 4 D 65343 Eltville am Rhein Germany (P) +49.6123.630285 Regional Sales: frank.sempert@saugatech.com



Are you getting the best research, insight, and advice on disruptive IT?

Register to receive Saugatuck's complimentary **Research Alerts**, and browse our comprehensive **Research Library** on topics such as SaaS, Cloud Infrastructure, Open Source, and Enterprise Social Computing (among others).

- To Register: <u>http://research.saugatech.com/cgi-bin/order/signup3.pl</u>
 To Browse the Library: <u>http://www.saugatech.com/researchbytopic.htm</u>
- To Learn About Saugatuck's CRS Subscription Research Service: http://www.saugatech.com/crs.htm

