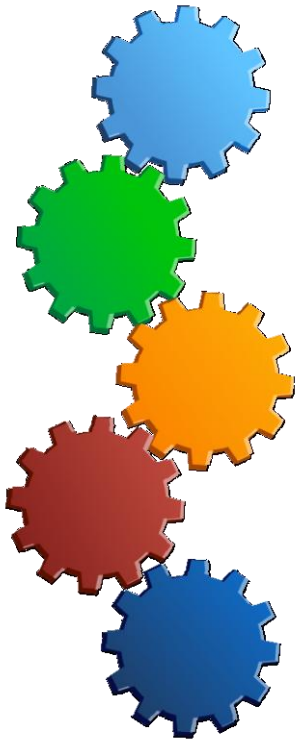
Cloud Computing Implications on Service Revenues and IT Channel Providers

An "INSIGHT Group" Research Paper



Considerations as to maximizing potential business value to your firm through implementing Cloud Computing Technology

Cloud Computing can be used across industries to help drive growth in Services Revenue.

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Table of Contents

The Insight Group helps organizations develop services and solutions strategies, plus manage execution so clients achieve their goals. For 15 years, our consultants have guided firms to adopt best practices from planning, marketing and sales through delivery. We have also advised companies on strategic account management and how to effectively leverage information technology (IT) as part of an overall business model.

The Insight Group's Research and Publication Program provides **fact-based and forward-looking viewpoints.**

This paper outlines cloud computing technology impacts on IT buyers and providers. We also describe how cloud computing can be used across industries to help drive growth in services revenue.

1. Focus on Service Revenues, Enabled by Effective Information Technology

Today, firms across industries are focusing on service revenues for financial growth, higher market share, deeper customer satisfaction and stronger differentiation. Gartner reported "increasing enterprise growth" is the #1 CIO priority for 2011[1]. "Attracting and retaining new customers" is #2.

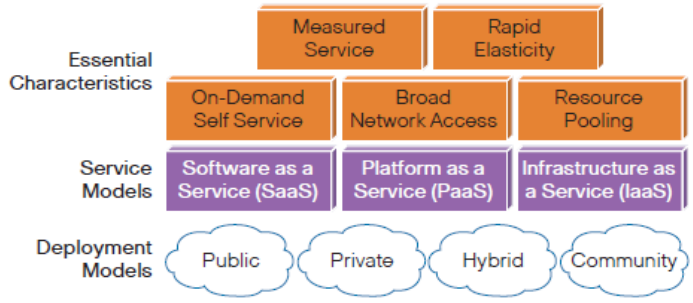
Forrester analysts see IT becoming more embedded in business processes. IT leaders are expected to enable experimentation and innovation for product design and testing, new business models plus enhanced customer experiences. Pressures continue for IT to deliver agility for businesses -- while driving down costs and risks. Cloud computing does not change IT goals, but it can help accelerate progress towards meeting them.

2. Cloud Computing Definition; Benefits, Adoption, Inhibitors and Trends

Definition:

Buyers, IT providers, and industry analysts now generally embrace a similar definition of cloud computing. The National Institute of Standards and Technology (NIST) has defined cloud computing as a model to enable:

"…convenient, on-demand [internet-based] network access to a shared pool of configurable computing resources. They can be rapidly provisioned or released with minimal management effort or service provider interaction[2]."



Source: National Institute of Standards and Technology (NIST):
http://www.csrc.nist.gov/groups/SNS/cloud-computing/index.html

Five Essential Characteristics of Cloud Computing

On-demand self-service: Consumers can automatically provision capabilities (server time, network, storage).

Broad network access: A secure, robust network exists, able to handle any kind of information - data, voice or video. Users can access capabilities in standard ways through platforms such as laptops and mobile devices.

Resource pooling: Capacity is shared, with physical and virtual resources dynamically assigned based on demand. Users feel location independence; they often do not control or know where IT assets physically lie.

Rapid elasticity: Capabilities can be quickly provisioned, scaled up/down, acquired in units and are 'billed per use'.

Measured Service: Systems automatically control and optimize available capacity, guided by metering. Usage can be monitored, controlled, reported and is visible to providers and buyers.

Three Primary Service Models

Software as a Service (SaaS): Use the provider's applications running on a cloud infrastructure, accessed from a web browser, smartphone or similar 'thin device'.

Infrastructure as a Service (IaaS): Provision processing, storage, networks and other IT computing resources. Buyers can deploy and run applications, middleware and operating systems.

Platform as a Service (PaaS): Develop and deploy user-created or acquired applications on a cloud infrastructure.

Four Main Deployment Models

Private cloud: For use by one organization, self-managed or by a 3rd party, on- or off-premise.

Public cloud: Used by the general public, owned by an organization selling cloud services.

Community cloud: Shared by several organizations with common concerns (e.g. mission or security needs).

Hybrid cloud: Mix of two or more private, community or public clouds, integrated via data and application linkages.

Buyer / End User, Vendor and IT Channel Understanding about Cloud Computing:

Cloud computing definitions cover 'what is provided', 'how it is performed' and 'for which buyers'. However, studies affirm broad lack of understanding among buyers, vendors and IT channels.

In mid-2010, the Computer Technology Industry Association (CompTIA) researched end user (buyer) and IT channel views about the definition of cloud computing.[3] Results showed the following:

- Only 24% of end users and 29% of the IT channel believe existing definitions are sufficient. Nearly 60% indicated definitions need to be clearer.
- There is need for a well-defined, simple value proposition for buying and selling cloud services. Channel partners said the definition must better handle reseller and services player roles.

Insight Group clients are asking questions such as:

- What tangible benefits are available from cloud computing, beyond those IT can provide today?
- Which processes can best use SaaS applications, with standard functionality, pay-for use, scalability, etc.?
- What guarantees can I get for security, service level and availability?
- What are the options, risks and costs for integrating 'cloud-based data or infrastructure' with other IT capabilities?

Benefits Expected and Realized from Cloud Computing:

Todd Tibodeaux, CEO of the Computing Technology Industry Association says: "Cloud computing is ... about changing the cost structure from capital to recurring, operational expense...making IT more accessible, productive and affordable." Cloud benefits fall into 3 areas:

1. Reduced IT cost with lower capital investment,
2. Faster and/or easier access to required computing resource and
3. Higher levels of IT and business flexibility (or agility).

Saugatuck Technology research on cloud computing found 35% of respondents expect a drop in IT infrastructure costs and 31% seek lower capital investments.[4] 22% expect cloud computing to enable business flexibility, plus improved IT and customer service. Saugatuck expects higher business agility to yield the most value over time.

IDC cites companies are realizing IT provisioning in minutes vs. hours, with 50% faster to-market[5]. Other outcomes include up to 50% fall in capital cost, 25-30% drop in operational expenses and 35% lower time plus cost for SW maintenance. Research sponsored by Fujitsu. Cited firms reported average actual 24% cost savings[6].

Inhibitors to Adopting Cloud Computing

Saugatuck cites the top challenges to adopting and managing cloud IT software[7], as follows:

- Security and privacy concerns (cited #1 by 48%). Cloud computing ROI not yet verified (cited by 24%).
- 17% to 19% rated other concerns: 'integrating data across the cloud and with other infrastructures', 'ensuring performance', availability meet service level needs' and 'modifying IT sourcing practices'.

In other research 28% rated "not knowing where data is located" as their top concern. Our clients have questions about cloud security, plus want to ensure their intellectual property and competitive advantage is protected.

Saugatuck concludes: "moving to the cloud will entail IT making a fundamental shift from managing assets to supporting platforms, solutions and business processes".

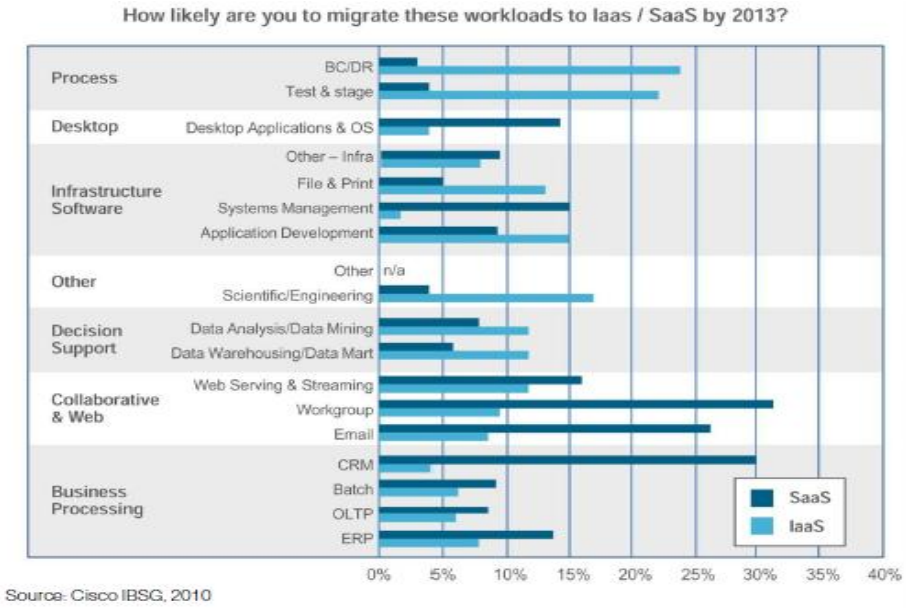
Adoption Levels: Summary and "Cues for Applications that Best Fit on the Cloud"

IDC predicts 15% of 2011 IT revenue will be tied to the cloud -- directly or via supporting infrastructure[8]. Gartner sees 35% of IT workloads shifting to clouds by 2014, and the $56B global 2010 cloud market rising to nearly $150B in 2013[9]. As related, Forrester analysis expect the cloud market to expand purely by displacing other IT spending[10].

43% of 2,000 CIOs surveyed expect to run a majority of applications and infrastructure via cloud computing by year-end 2015[11]. As of mid-2010, cloud usage is dominated by test / development, CRM and collaboration (email, conferencing. Pilot projects account for 50% of usage, with 20% of survey respondents using cloud enterprise-wide.

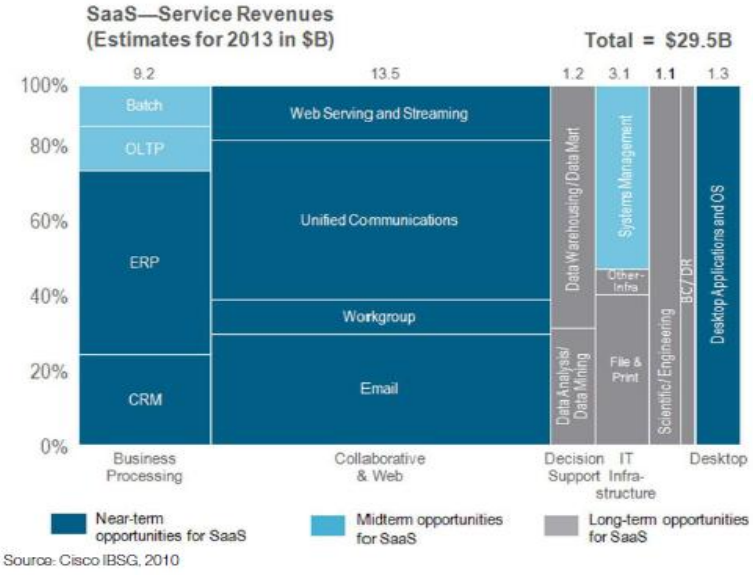
The following types of workloads may be better suited for cloud computing:

- Variable or unpredictable volumes (seasonal spikes, special analysis needing short-duration capacity),
- Functions with a high need for agility. Activities requiring easy procurement, quick boarding and set up. For example, sales and marketing campaigns, or storage (backup),
- Extensions to functionality widely available on the cloud (e.g. collaboration, email, or social media…) and
- Capabilities tied with mobility, where cloud is rapidly maturing.



Source: Cisco IBSG, 2010

Worldwide Market Potential for SaaS, per Application



Source: Cisco IBSG, 2010

A Deeper Look into ERP on the Cloud

Aberdeen Group has tracked willingness to deploy SaaS ERP since 2007[12]. 2007-2009, 25% of respondents stated interest to consider "On-demand / SaaS". In 2010, 40% showed readiness: +16 points or +61% from 2009.

A leading IDC analyst states CFOs will remain hesitant to 'migrate financials into the cloud' until they are convinced it has equal or better stability and security as on-premise options.

3. Cloud Computing Implications on IT Vendors and Channels

The Computer Technology Industry Association cites: "The balance between direct and indirect cloud computing sales is a matter of scale and capability...

- As products become simpler to implement via the cloud, they are more likely to be sold directly by providers;
- More complex cloud offerings and systems requiring extensive integration and ongoing support are more likely to flow through the channel[13]."

To gain the most value from IT investments, buyers should understand evolving shifts in providers plus channels while learning about their new services. This includes pro-actively creating strategies, processes, governance, and gaining knowledge plus adapting so they can realize expected ROI from cloud purchases.

Using early 2011 research[14], MarketBridge predicted six primary routes-to-market for cloud computing will emerge:

Route 1: Web-enabled self service

This is a mass market. volume model. It has a low cost approach, and easy to use, web-based capabilities to research, evaluate, select, order and configure services. Customers will pay for and get support through the web.

Route 2: ISV Marketplaces

Vendors like Microsoft, IBM, Oracle and Salesforce.com compete as 'the' platform for ISV-based cloud applications. They each have standards for development and/or integration. Marketplaces will provide awareness about vendor applications and ways to compare solutions. Users will mostly interact with ISVs for boarding and tailoring, support, etc. once purchases have been made through the marketplace.

Route 3: Regional Cloud Aggregators (major regional system integrators)

Private and hybrid clouds are being adopted for applications, and to provide IT infrastructure like storage or security. Firms using these clouds look for a 'trusted advisor' to help with strategy, design and IT operations decisions.

Global and national system integrators are focusing mainly on large enterprises. This leaves a gap to be filled by regional cloud integrators - especially for mid-market (and underserved large enterprises).

Route 4: Strategic Alliances

Cloud has accelerated formation of strategic alliances. One example is the VMWare, Cisco and EMC venture (VCE). As an alternative to buying from alliances, purchasers could center cloud efforts around a major vendor, such as IBM, Microsoft, HP, Oracle, Salesforce.com and even Google or Amazon (for general productivity needs).

Route 5: Business Process Providers

As SaaS becomes more accepted, functionally strong processes will become available through an outsourcing model that leverages these cloud applications. Cloud business process outsourcing (BPO) will cover more varied and specific functions. Scalability, frequent upgrade cycles and metering will enable services at more granular levels.

Route 6: Industry-Specific SaaS Channel

Industry micro-vertical focus has gained attention and will carry on to cloud computing, especially SaaS solutions. VARs and integrators will build incremental functionality, extending ISV core applications for specific customer needs (the last mile of integration). ISVs have training programs on industry-specific topics, with core HW vendors offering education and assuring capabilities in the hosting community.

SaaS allows for remote configuration and customer support. To differentiate from integrators, industry-specific software firms with geographic depth will distribute expertise among specialized teams, partners, and geographies -- seamlessly delivering at competitive cost.

State of Business Partner Focus or Concern about Cloud Computing

Based on mid-late 2010 research, there's evidence a significant percentage of channel partners have either not accepted cloud computing as critically important near-term, or they are uncertain about how to adapt in serving interested customers.

- An IBM study of 100 UK-based hardware resellers found 56% expect cloud to have some or a significant impact on revenues to 2015[15]. But, 15% did not know what the effect would be, and fully 29% see little or no impact.
- Per research of 1,000 resellers, VARs and SIs: 40% have "fear and confusion" about cloud technologies[16].

Also, buyers are not looking at local/regional providers as an important source for the cloud purchases:

Top 3 Channel Preferences *(n = over 500)*	***% of Respondents***
Direct from large, established vendors	47%
Cloud hosting firm, managed services provider or global system integrator	each rated at 30%
Direct from pure-play cloud vendor	29%
IT consultancy	23%
Industry-specific VAR or system integrator	18%
Local/regional VAR or system integrator	11%

Source: Saugatuck Technology, 2010

Channel firms must make cultural and business model adjustments from transactions to relationship management and build needed skills to drive resource utilization, up-sell and gain contract renewals. Also, appropriate changes to sales compensation models will be required to recognize the shift in operating model and business focus.

Vendor and Tier-1 Distributors: Actions to Consider

- Help partners understand what cloud' means to these firms' cash flow, staffing, risk and business model,
- Offer shared services, so channel partners can provision new users on their own. This includes tools to access usage data and enable bill presentment and
- Offer cloud computing architecture and planning services to mid-market clients.

Industry-specialized VARs and System Integrators (channel for ISVs) Actions to Consider:

- Better understand the real, fully loaded costs of operating on-premise infrastructure and applications (includes internal expenses companies bear to run and maintain on-premise applications),
- Refute perceptions that SaaS applications are simple, can't be customized nor used for serious enterprise class applications and
- Use development tools to customize or extend applications, plus integrate with those on-premise or in the cloud.

Technology-Focused Resellers: Actions to Consider

- Sell basic IaaS to mid-market,

- Advise and assist with creating, monitoring service level agreements and
- Provide technical consulting on security, data management / regulatory compliance, mobile computing (including tablets). Provide support to help create and manage private clouds.

4. Considerations for Generating Services-Based Revenue

Technology plays a key role in enabling services-based revenue. It connects providers across the value chain, from sales through delivery and support, plus offers critical value via communications with customers.

Cloud Computing to Help Extend Current Services or Product Offerings

- Customer interaction can be supported with mature SaaS solutions – from sales and delivery processes through relationship management. Cloud computing offers easier, more timely, transparent access to common data,
- Metered usage enables efficient, effective customer support for problem resolution and/or performance reporting,
- Cloud computing can help launch services concurrently across countries or regions -- advantages for global firms,
- Easy to provision and elastic capacity can reduce capital investments or over-provisioning. This can be especially relevant for services relying on unstructured data (video, pictures, voice) and
- Beyond CRM, and HR, 'SaaS edge applications' are supporting targeted functions (for example: marketing automation, workforce planning, price optimization, case management).

Cloud Computing for Newly Formed Businesses

- New enterprises require flexibility and don't have a legacy IT infrastructure. Beyond variable costs, these firms also value ease of boarding and agility to adapt as their businesses evolve.
- Their business models often rely on partnerships (virtual value chain). These other players, plus target customers may have already adopted cloud computing capabilities.
- Many new services ventures are information-intensive, which plays well to benefits from cloud computing.

Two Scenarios for "New Services Revenues", plus Views of Cloud Computing Value

1) Business Process Outsourcing -- apply capabilities were the firm is highly competent to perform a service on behalf of customers.

- Companies can set up new divisions whose specific mission is to sell and deliver processes on behalf of their customer. These new units may benefit from cloud computing – using their own technology platform and resources, without expending capital for infrastructure.
- By nature, outsourcing processes require reporting, information sharing, collaboration, requirements gathering etc. These can be well accommodated with cloud-based SaaS solutions.
- IaaS provides cost-effective options for security, systems management, storage, capacity bursting, backup and recovery capabilities. And, PaaS give developers tools plus environments for rapid development.

2) New solutions: services with new products or services bundles. Enable customers to better do their jobs.

- These solutions use best practices and deliver value via flexibility and choice. The provider may perform tasks on behalf of customers. Or, they may give customers self-service access to tools that enable strong execution.

- Customers variably link together or mix internal processes with service provider capabilities. They may also purchase technology as a service (for example, buying capacity for resource-intensive analysis).
- **By embedding services into a customer's operations, providers lower the risk of being displaced.**

Some Key Questions for Services Leaders to Consider

- How can cloud computing speed entry into new businesses, reduce competitive pressure and raise efficiency?
- Which service processes demand agility beyond our current IT capabilities? [Consider the ability to better collaborate with partners or customers, scale with volume changes and communicate with mobile devices.]
- Can available [SaaS] applications give us the functional support we need, and/or required industry features?
- How could an IT pay-per-usage basis allow us to offer other types of services, or differentiate in the market?
- What security and/or governance challenges come with off-site data and using 3rd party IT management?
- How could a cloud computing -based development platform speed time to market?

5.0 Closing

Cloud computing is a top CIO priority. It will remain a key IT and business topic in the coming years. Daily, we see announcements of meaningful vendor services, partnerships, business practices or technological advances.

We cannot predict how quickly cloud capabilities specific to services businesses will become a strong force for change and value. **However, it is clear that general advances in cloud computing, expanded IT adoption plus innovation in services business models will benefit organizations and their customers around the world.**

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About the Authors

Michael Sinneck is a Managing Partner at The Insight Group. He leads the firm's consulting on Professional Services P&L and Complex Services Program Management, Merger Integration and Services Sales Leadership.

Mr. Sinneck is highly skilled at identifying significant market opportunities and developing approaches to capitalize on their potential. His strong general management experience is based on having managed multi-billion dollar P&Ls and successfully delivered solutions to challenging client problems.

Prior to joining The Insight Group, Mr. Sinneck completed a 32-year career at IBM, holding top executive positions in the Global Services group. He also served as President and CEO of Fujitsu Consulting and then EVP of Business Solutions at Fujitsu America. Mr. Sinneck's management experience further includes Senior Vice President of Consulting at VERITAS, Executive Vice-President, Corporate Program Management Office at Citigroup and Corporate Vice-President, Worldwide Services at Microsoft.

Mr. Sinneck has been a member of the advisory board for The University of Arizona Management Information Systems department, ranked nationally among the top 5 programs of its type. He also advises Dynamics Ventures and Orion Systems Integrators regarding growth strategies.

Michael Franken, an Insight Group Associate, has over 20 years experience providing market research, competitive insights and strategy consulting to IT industry leaders. He is a subject expert on services-based business models. Mr. Franken is a Visiting Lecturer at the North Carolina State University Jenkins Graduate School of Management.

Mr. Franken's clients include Executives for solutions sales units with up to $10B+ yearly revenue. He has done extensive analysis on the applications solutions, cloud computing and IT services markets. Insights enabled clients to optimize ROI from marketing investments and alliances, plus run high-performing service businesses.

For 8 years, Mr. Franken held a senior role in an elite management consulting practice. He led design and implementation of the IT industry's best practice solutions marketing and sales model. Mr. Franken has also played key roles on engagements dealing with account coverage, technology marketing and services development.

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