From a Residential ISP to a Business Communications & IT Services Provider – Analyzing EarthLink’s Transformation Strategy

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Introduction

Continuing commoditization of bandwidth, and the proliferation of IP-centric applications—Voice over Internet Protocol (VoIP), Unified Communication (UC), and IP data—are forcing Communication Service Providers (CSPs) to reinvent themselves as end-to-end solution providers. The cloud-based delivery model is also threatening the business model of CSPs by pushing them to adapt to selling services in a utility-based, pay-as-you-go model, as opposed to long-term contracts involving monthly recurring charges (MRC). However, CSPs, like pure-play cloud providers, are not content with the thin margins from on-demand cloud services; and are, instead, building value-added services that they hope to bundle with their cloud offerings. This is evident from the multi-pronged initiatives of leading CSPs to enhance their expertise in network and applications management, managed and hosted services, and cloud services.

EarthLink is one such CSP which has undergone a major business transformation in the past two years. From predominantly being a residential Internet Service Provider (ISP) in 2010 to positioning itself as a leading managed services provider in the business communications and IT services market in 2013, EarthLink has come a long way. For example, the company derived 76 percent of its revenues from the business services segment in 2012, as opposed to just 26 percent in 2010. EarthLink’s rapid growth in the business services segment is a result of its organic and inorganic growth strategy. The company’s efforts have been focused on growing its growth retail products that include Multi-Protocol Label Switching (MPLS) Virtual Private Network (VPN), Hosted VoIP, and IT services. EarthLink’s business segment, EarthLink Business, consists of retail and wholesale product portfolios.

In this SPIE, we evaluate the factors contributing to the company’s successful transformation—specifically, the managed IT services strategy that is helping EarthLink position itself as a key competitor in the business services market.

Evolution of EarthLink in Business Communication Services Market

EarthLink’s foray into business services markets began in 2006 with the acquisition of New Edge Networks, a provider of managed IP solutions to business markets. This acquisition established EarthLink as a nationwide provider of MPLS VPN and dedicated Internet access (DIA) services to small and midsize businesses (SMBs). The acquisitions of ITC DeltaCom and One Communications, in late 2010, significantly expanded EarthLink’s IP network footprint and helped

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1 In preparing this report, Stratecast conducted interviews with the following EarthLink representatives:
- Brian Fink, Executive Vice President and Chief Technology Officer
- Mike Toplisek, Executive Vice President of Sales and Marketing
- Vishal Sharma, Vice President Products, Cloud and IT Services

Please note that the insights and opinions expressed in this assessment are those of Stratecast and have been developed through the Stratecast research and analysis process. These expressed insights and opinions do not necessarily reflect the views of the company executives interviewed.
to establish the company as a market contender in the integrated voice and data services markets. Dimensions of these two acquisitions are:

- ITC DeltaCom added 16,400 miles of fiber; a 14-state Synchronous Optical Network backbone, with 35 metro fiber rings; and 294 co-location point of presence (PoPs) and 20 voice and data switches—serving over 32,000 SMB, multi-location enterprises, government agencies, and wholesale customers in the southeast region of the United States.
- One Communications brought 629 co-location PoPs, connected by more than 11,700 route miles of fiber, serving a base of 113,000 small and midsize business customers in 17 states across the Northeast, Mid-Atlantic and Upper Midwest, including the major metropolitan markets of Boston, New York, Philadelphia, Baltimore, and the District of Columbia.

The two acquisitions helped to expand EarthLink’s capabilities as a provider of network and communication services in the business markets. Incomplete in the company’s drive to offer a broader range of services, EarthLink continued its pace of acquisitions into 2011 to round out its offerings to include IT services. EarthLink’s five strategic acquisitions in 2011 were:

- Saturn Telecommunication Services Inc. (STS Telecom) added VoIP services.
- Logical Solutions.net, Inc., acquired in May 2011, brought cloud computing, hosted network and security services to EarthLink’s product mix.
- Business Vitals, LLC, acquired in July 2011, added national managed IT security and professional services capabilities.
- xDefenders assets of Synergy Global Solutions, Inc., acquired in September 2011, enhanced EarthLink’s managed IT security portfolio.
- Synergy Global Solutions’ IT Solutions Center and hosted application business unit, acquired in December 2011, added managed IT services capabilities. EarthLink acquired relationships with approximately 120 value added resellers (VARs) that sold the IT solution center and hosted application services.

**EarthLink’s Approach to Business Communication and IT Services Market**

EarthLink’s multi-pronged strategy for growth in the business communication services market is as described below:

**Laying the Foundation: a Solid Network Infrastructure**

The business communication needs of today’s enterprises extend beyond the traditional voice and data networks. The proliferation of IP-centric applications—VoIP, SIP trunking, UC, and video conferencing—is increasingly driving enterprises to migrate to MPLS-based VPNs (from traditional private lines), and converge their voice, data, and video networks onto a single network infrastructure. This is different from the pre-convergence era’s network infrastructure that consisted of separate networks for voice (T1 private line), data (Frame Relay), and video services (Asynchronous Transfer Mode). MPLS VPNs allow class of service (CoS) to be applied on the network traffic, thus enabling traffic prioritization while converging applications onto a single network. MPLS VPNs can also be accessed using multiple access technologies—for example, DSL, Cable Modem, T1/T3, SONET, Ethernet, Wireless, Satellite, or the public Internet that can be
encrypted using SSL or IPsec tunneling—thus making it easy for enterprises to connect distributed locations and remote users.

By combining the network assets from its New Edge Networks, ITC DeltaCom, and One Communications acquisitions, EarthLink has established itself as a nationwide MPLS VPN services provider. The company has also lit new routes from Memphis to Chicago, Ashburn to New York City; and express routes from Atlanta to Miami, and Ashburn to Birmingham. EarthLink’s current network assets include 29,421 route miles of fiber, 90 metro fiber rings, and enterprise-class data centers that provide IP coverage across more than 90 percent of the United States. The company supports multiple access technologies to its MPLS VPN—including DSL, T1, Ethernet, Wireless, IP Sec—with up to six levels of CoS support. This level of CoS support on DSL access is a key differentiator for EarthLink, as it helps the company compete more effectively in deals that involve multiple locations that require speeds lower than T1 speeds.

Frost & Sullivan’s research data highlights the rapid shift from legacy wide area networks (private line, ATM and Frame Relay) to MPLS VPNs and Carrier Ethernet (see Figure 1).²

**Figure 1: Revenue Evolution by Service Type, (United States), 2012 & 2017**

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Revenue (%)</th>
<th>2012</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Line</td>
<td>39.9%</td>
<td>26.5%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Frame Relay</td>
<td>2.6%</td>
<td>13.8%</td>
<td>13.8%</td>
</tr>
<tr>
<td>ATM</td>
<td>1.2%</td>
<td>1.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>SONET</td>
<td>8.8%</td>
<td>3.9%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Waves</td>
<td>2.3%</td>
<td>4.7%</td>
<td>4.7%</td>
</tr>
<tr>
<td>MPLS</td>
<td>26.5%</td>
<td>38.9%</td>
<td>38.9%</td>
</tr>
<tr>
<td>Ethernet</td>
<td>18.7%</td>
<td>40.8%</td>
<td>40.8%</td>
</tr>
</tbody>
</table>

Source: Frost & Sullivan

With its primary network services focus being MPLS VPNs, EarthLink has positioned itself in high growth areas. Our research also indicates that the attach rate of VoIP/SIP trunking is more than 50 percent with MPLS VPN services sold by service providers. EarthLink’s hosted VoIP and SIP trunking services complement its MPLS VPN offering.

² See *US Data Transport Services Market Update, 2013* (Upcoming)
**Invest in Growth Areas – An Impressive Managed IT Services Strategy**

Cloud computing is revolutionizing the way enterprises buy IT infrastructure (computing and storage) resources. Cloud allows organizations to buy IT resources as a utility, in a pay-as-you-go model, to quickly scale up and down their IT workloads. This model appeals to businesses of every size, as it shifts the IT spending equation from capital expenditure (CAPEX) to operational expenditure (OPEX). Not surprisingly, more enterprises are choosing the flexibility and low investment associated with third-party hosted infrastructure options. In Frost & Sullivan's 2012 enterprise cloud survey, respondents listed “decrease IT infrastructure costs,” “support for business continuity/disaster recovery,” and “improve security and compliance” as the top drivers for cloud Infrastructure as a Service (IaaS) adoption.¹

While enterprises are interested in cloud, they have shown a strong preference for continuing to leverage their existing environments. Hence, Frost & Sullivan believes that the emerging enterprise IT landscape will be a hybrid one that includes a combination of scenarios—for example, colocation hosting, private data centers, dedicated hosting, hosted private cloud and public cloud.

EarthLink’s IT services strategy is focused on supporting enterprise migration to a hybrid IT architecture. In addition to managed colocation and dedicated hosting services, following are the key initiatives undertaken by EarthLink to position itself in the enterprise IT services market:

**Data Center Expansion** – Data centers are the backbone of cloud service delivery models, and EarthLink realizes that. The company has upgraded its Pittsford, New York and Marlboro, Massachusetts data centers, and added three new data centers (in San Jose, Dallas and Chicago) that support “next generation IT services” or cloud services. One additional next-generation data center, in Miami, is planned to go online within the next few months, taking the company’s total cloud-enabled data centers count to five. These Statements on Standards for Attestation Engagements (SSAE) 16 compliant data centers are strategically located to take advantage of EarthLink’s MPLS network, and create an end-to-end solution of network and cloud for end customers. Existing MPLS customers of EarthLink can leverage the company’s private network capabilities and cloud offerings to create a secure cloud offering.

**Rollout of Next Generation Cloud Services** – EarthLink approaches the cloud services market in a holistic manner. The company packages its network assets, cloud services, and managed services in a way that offers more value to customers than just selling commodity cloud services.

Following is a brief description of EarthLink’s cloud offerings:

- **Cloud hosting**⁴ – This is a VM vSphere 5.1 virtual environment-based virtualized server hosting offer from EarthLink. It combines computing (from Cisco and VMware); storage

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¹ See CC 3-2, 2013 Cloud Infrastructure as a Service Market: Steady Growth Across All Segments (May 2013).

⁴ EarthLink uses the term “cloud” to market its managed hosted service offering. The company does not have a true cloud IaaS (can be self-provisioned by clients in an on-demand manner, using application programming interfaces or graphic user interfaces) offering currently, but is in the process of rolling out enterprise class hosted private cloud using Virtustream’s xStream platform.
(NetApp); network (MPLS VPN and Ethernet form EarthLink and other connected providers); and secure network services (based on Juniper and Cisco security appliances); and is billed on a monthly basis. Customers can choose to manage the dedicated virtual server themselves or use EarthLink’s managed services.

- **Cloud workspace** – This is EarthLink’s managed hosted virtual desktop offering that enables enterprises to connect their remote and mobile employees to enterprise applications and data that are integrated on centralized virtual servers. Employees can access their profile-specific applications (that are enterprise controlled for security policies and directory permissions) from anywhere, using any device, via Internet connection. The service is offered on a subscription based model, with a monthly fee charged per employee.

- **Cloud server backup** – This is EarthLink’s cloud-based backup solution that enables enterprises to back up data in a SAN disk environment, for instantaneous online access and recovery. Customers can set backup levels to incremental, full system, real time, and full hardware, to prevent data loss and business downtime.

- **Cloud disaster recovery** – For a monthly subscription fee, this cloud-based IT disaster recovery solution enables enterprises to replicate their primary server environment’s applications and operating systems on a continuous basis, by purchasing only the amount of storage needed and a minimal amount of CPU and RAM. Customers can use this service to bring up a failover IT environment to replace primary; and pay for the full failover only if it is activated, based on a pre-defined contingency plan.

EarthLink announced a partnership with Virtustream in January 2013, to further enhance its cloud portfolio. The company is in the process of deploying Virtustream’s xStream™ software in its cloud data centers. This will enable EarthLink to offer small and midsize business (SMB) customers an expanded set of enterprise-class cloud services for mission-critical applications that require security, application performance SLAs, complex network routing, compliance, resource pooling, and business continuity. Customers will be able to configure virtual machines in an on-demand basis, in real-time, using APIs. EarthLink will wrap its managed services offerings with this enterprise cloud offering to address the SMB market need for a “managed” cloud offering. Using the software, EarthLink also plans to offer on-demand or pay-per-use public cloud services, through which SMB customers will be able to manage their spend on cloud by only paying for what they use. EarthLink’s cloud IaaS offering is expected to become available in the market in the third quarter of 2013.

EarthLink’s combined product suite—managed colocation, dedicated hosting, managed hosting (dedicated and virtualized servers) services, cloud IaaS (when available), and private networking—offers enterprise customers a mix of products to choose from for their hybrid IT infrastructure. This direction is consistent with Frost & Sullivan research that indicates that a hybrid model appeals to enterprise customers that are looking to leverage the cost benefits of the shared cloud model, without fully giving up control or security associated with other environments. Bursting (to handle unpredictable traffic), disaster recovery (to

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plan for failover from dedicated to public cloud), and splitting (critical apps on dedicated servers and non-critical apps on public cloud servers) are some of the key reasons enterprises are adopting a hybrid IT infrastructure model.

**A Robust Managed, End-to-End Security Services Portfolio**

EarthLink’s acquisition strategy enables the company to complement its network and IT services with managed security services. The company’s security services portfolio is spread across its MPLS and IT service offerings, as follows:

**Hosted network security** – This is a cloud-based firewall service, which is fully integrated into EarthLink’s MPLS network and its next generation data centers, to guard enterprise MPLS networks against inbound and outbound threats, such as intrusion detection and prevention (IDS/IPS), unauthorized network access, inappropriate Web content, and to isolate infected files and malware.

**Managed premises firewall** – This is a fully managed firewall device, located at customer premises, which provides advanced next-generation traffic filtering capabilities to protect devices on trusted networks from untrusted networks (primarily the Internet).

**Data center firewall** – This is an advanced network security service powered by Fortinet, for more robust security to cloud hosted servers and applications in the data center. This ensures protection of enterprises’ virtual IT environments at EarthLink cloud data centers, against inbound and outbound security threats.

**Secure remote access** – This is a secure remote VPN access service that is powered by Juniper, and is fully integrated with cloud in multiple locations, to provide EarthLink’s customers with SSL VPN access for MPLS and cloud-hosted solutions.

In addition, EarthLink hosted security services are hosted in SSAE 16 compliant enterprise-class data centers to meet industry compliance requirements (HIPAA, PCI, and GLBA). Customers can also choose to use EarthLink’s proactive management and support services, which include 24/7/365 monitoring, real-time reporting and alerts, and up-to-date security policies, procedures, and software.

**Effective Sales Strategy**

EarthLink has re-organized its sales strategy to align with its business transformation initiative, which is to compete in the business communications and IT services space. While in the past, the company’s sales personnel have been largely network-centric (with a huge focus on selling MPLS VPNs), EarthLink has been actively re-coaching its sales team to sell both network and IT services. The company reduced its direct sales force focused on small markets from over 400 to 170 sales personnel that are more IT-centric and possess in-depth expertise in IT services. Like most other communication service providers in the market, EarthLink is competing in the cloud services market by positioning itself as a “network-enabled” cloud services provider, and rightfully so. To take advantage of its combined nationwide MPLS network, cloud services and managed security services offerings, EarthLink has created a solutions engineering organization comprised of technical experts that work with the sales team to design network and cloud solutions to potential customers. The company is also slowly expanding its sales channels by taking advantage

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of the channel partner relationships it acquired through mergers and acquisitions. Currently, around one-third of EarthLink’s sales are through indirect sales channels versus two-thirds being attributed to direct sales.

**Fully Managed, Solution-centric Marketing Strategy**

EarthLink understands the competitive landscape, which includes large CSPs, pure-play cloud providers, and hosted service providers. To make the most of its capabilities, the company has elected to go after the SMB segment with its fully managed communication and IT services portfolio. The IT management and support needs of this segment (e.g., lack of qualified IT staff and the need to reduce OPEX) present opportunities for providers like EarthLink to position their managed services offerings. EarthLink’s managed services suite, offered with its MPLS VPN, includes tasks such as router management, providing utilization statistics, detecting network outages, and automating trouble response and resolution. The suite can be accessed using myLink™, the EarthLink Business online portal that features order status information, repair and trouble ticketing, reporting, and the ability to closely monitor network performance.

EarthLink’s IT services—colocation, cloud hosting, and dedicated servers—are backed by managed support services that come with default bronze level management (network, power, hardware support, and server reboot) included in them. An additional three levels of managed services are available for customers that need help with their IT infrastructure.

To help SMB customers that require a higher level of handholding with their IT services, EarthLink offers TechCare, a fully managed outsourced help desk solution that can take on complete end-to-end management of businesses IT environments. Businesses can choose from 24x7 or 9x5, and Level 1 or Level 2 options to outsource their IT support services to EarthLink. Level 1 support includes desktop, application, and network support. Level 2 includes Level 1 services plus server OS diagnostic and troubleshooting; move, add, and changes in Active Directory; user administration of MS Exchange; and hosted email applications.

**Business Segment Financials Reflect EarthLink’s Growth**

While EarthLink’s business services revenue mix is still predominantly skewed towards legacy competitive local exchange carrier (CLEC) products—standalone primary rate interface (PRI), DSL, and legacy voice—new business bookings (based on revenues) are rapidly shifting toward its retail and wholesale growth products of MPLS VPN, Hosted VoIP, and IT services. As shown in Figure 2 below, 65 percent of new sales in the first quarter of 2013 consisted of growth products that include MPLS VPN, hosted VoIP, and IT services portfolio.

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Figure 2: EarthLink’s Business Bookings Mix, First Quarter 2012 to First Quarter 2013

Business Bookings Mix

<table>
<thead>
<tr>
<th></th>
<th>Q1 2012</th>
<th>Q2 2012</th>
<th>Q3 2012</th>
<th>Q4 2012</th>
<th>Q1 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail CLEC &amp; Legacy Products</td>
<td>60%</td>
<td>54%</td>
<td>50%</td>
<td>50%</td>
<td>35%</td>
</tr>
<tr>
<td>Retail Growth</td>
<td>34%</td>
<td>36%</td>
<td>37%</td>
<td>39%</td>
<td>40%</td>
</tr>
<tr>
<td>Wholesale Growth</td>
<td>7%</td>
<td>10%</td>
<td>13%</td>
<td>12%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: EarthLink
The emergence of cloud computing is altering the CSP competitive landscape in an irreversible manner. Both large and small CSPs are rethinking their business strategies to transform themselves into end-to-end communications and IT solution providers, to compete in the enterprise market. This includes providing cloud services to help enterprises manage the shift from a CAPEX to a concentrated OPEX-based IT spending model.

EarthLink, like most other CSPs that are also cloud service providers, has focused its efforts on building value-added services that can be bundled with IT services or cloud-based offerings. This is evident from the initiatives the company has undertaken to enhance its network and IT services capabilities in the business markets.

From a market demand perspective, as providers of various kinds crowd the cloud services market—CSPs, pure-play cloud providers, hosting service providers, IT solution vendors and system integrators—CSPs that can combine network and cloud capabilities along with managed services are expected to see a greater opportunity for their offerings. The SMB market segment represents a huge revenue opportunity, while demanding service provider handholding for communication and IT services. Midmarket users are usually open to experimenting with new technology and services that can help them reduce CAPEX and increase operational efficiency. However, the segment lacks in-house IT expertise to implement and manage complex IT architectures. They tend to gravitate towards providers that can not only offer end-to-end solutions, but also help them with seamless migration to newer services by offering managed and professional services.

EarthLink is cognizant of this market segment’s requirements, and has focused on a transformation strategy that enables the company to extract a bigger share of the customer's wallet by bringing holistic solutions to the market. Stratecast | Frost & Sullivan commends EarthLink’s focus on bringing to the SMB market a network-enabled cloud offering backed by managed security and IT support services. The company’s initiatives are beginning to bear fruit, as reflected in its financial results, thus establishing EarthLink as a formidable competitor in the enterprise communications and IT services market.

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