Building a Winning Verticalization Strategy for CyberCarriers
The telecommunications industry has undergone a period of intense merger, acquisition and alliance activity as competitors attempt to hold on to their existing market positions and/or expand into new ones. The relatively newer value-added areas of data hosting, content aggregation (portals) and other related services that are in high demand in the new economy have accelerated this trend as players along the value chain compete for control of customers and areas where attractive margins are anticipated.

A new and important type of company – which we have termed “CyberCarriers”1 — has emerged in the telecommunications landscape. We define CyberCarriers as a new group of service providers that are integrating data centers with very high bandwidth backbone networks to provide platforms for the delivery of next-generation content and applications services. The CyberCarrier business model is a logical response to the evolving competitive environment in the increasingly Internet-based telecommunications industry. According to this, network service providers (NSPs) are expanding into data center services in order to hold on to their transport, access and other networking revenues that are being increasingly commoditized by emerging players or other aggressive incumbents.

Noteworthy is that the trends affecting different players along the value chain are not independent and can converge in turn to create other trends. Application service providers (ASPs) and CyberCarriers are a case in point. Overcrowding of players in the ASP space is anticipated to drive specialization and more competitive value propositions. While the dust has far from settled, the landscape is expected to evolve into one with a small number of carriers and ASPs. Further, many ASPs are going vertical, focusing on specific industries as a means to leverage institutional knowledge and differentiate themselves in the marketplace.

As the competitive environment intensifies, CyberCarriers will also be under pressure to differentiate themselves while trying to maximize network traffic; this provides both an opportunity and a threat: ASPs will compete with them in trying to bundle end-to-end vertical communications solutions, while at the same time looking to CyberCarriers to provide leading-edge services in a commoditized manner. In both cases, the clear capability advantages of each of the parties implies that the delivery of the vertical solutions will likely be done through a series of partnerships. For CyberCarriers this means, at a minimum, developing a set of vertical capabilities required to serve/integrate with an ASP, and in the more aggressive case, developing and selling the solutions and providing the partnership management and integration role.

This Viewpoint presents key considerations for CyberCarriers expanding into the end-to-end vertical solution space; in the course of this discussion, we will address four critical questions:
1) Why are vertical solutions attractive for CyberCarriers?
2) What are the capabilities required to deliver a vertical solution?
3) Why are partnerships the right approach to deliver a vertical solution?
4) How can a CyberCarrier operationalize a vertical solution strategy?

**Vertical Solutions Defined**

We perceive the telecommunications solutions space as comprising five building blocks (see Exhibit 1). The bottom two layers provide the infrastructure required to manage and control the network end-to-end, and the top three layers provide the applications required to deliver a complete vertical solution.

Vertical-specific solutions are formed from the bundling of solutions across all of the layers with a specific industry (vertical) focus. Cross-industry (horizontal) applications provide the common functional needs that are applicable across verticals, while the vertical-specific applications address the specific industry needs that require high levels of customization with low applicability across industries. Vertical-specific solutions are beneficial to service providers because they enable a segmented approach to serving the enterprise market. Each industry can be characterized by its unique dynamics and challenges. By focusing on these needs, sales teams can take a more focused, consultative approach to selling and delivering integrated high-value solutions (as opposed to individual communications services). Conversely, vertical solutions provide communications services that effectively address customers’ business challenges, allowing them to focus on their core business. Together, these two aspects of a vertical market approach provide carriers a powerful growth strategy derived from a differentiated market approach.

Vertical-specific solutions fall into two categories: “true vertical” solutions are applicable to a specific industry and have limited or no extendability to other industries; “vertical customized” solutions are tailored to solve specific needs but have the potential to address needs across several industries. Vertical-specific solutions provide value-added to the customer by addressing specific industry and company needs. The
specific vertical needs translate into industry-specific traffic requirements. For example, the banking industry has high connectivity requirements based on the high-volume, low-to-medium bandwidth transactions based on frequent information exchange and daily batch processing. Conversely, the high bandwidth requirements in the pharmaceutical industry stem from the need to share large data files of genomics and bioinformatics information and to collaborate globally in R&D activities utilizing applications such as videoconferencing.

1) Attractiveness of Vertical Solutions for CyberCarriers

The attractiveness of vertical markets for CyberCarriers stems from a mixture of necessity and opportunity. On the one hand, necessity develops as core networking offerings (e.g., backbone transport and access) are commoditized and margins are squeezed. On the other hand, opportunity evolves from a market that is still in flux and from the advantages that CyberCarriers may develop over other players in the marketplace. The attractiveness of vertical solutions for CyberCarriers is largely based on six factors, including:

- **One-stop-shop advantage.** CyberCarriers hold the network and logistical infrastructure capabilities required to deliver end-to-end vertical solutions, while other players provide only pieces and have to rely on others to provide the end-to-end connectivity needed to deliver a complete solution.

- **Margin and market preservation.** Additional traffic can be added to the CyberCarrier’s core offerings, thus preserving the existing margins and market share, and increasing revenues.

- **New revenue source.** CyberCarriers can pursue new, unclaimed markets, where the

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### Exhibit 1. Vertical Solutions Framework

<table>
<thead>
<tr>
<th>VERTICAL-SPECIFIC APPLICATIONS</th>
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<tbody>
<tr>
<td>AUTOMOTIVE</td>
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<tr>
<td>TRANSPORTATION &amp; LOGISTICS</td>
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<tr>
<td>OIL &amp; GAS</td>
</tr>
<tr>
<td>LIFE SCIENCES/PHARMACEUTICALS</td>
</tr>
<tr>
<td>FINANCIAL SERVICES</td>
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<tr>
<td>COMPUTERS</td>
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<tr>
<td>MANUFACTURING</td>
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<tr>
<th>ENTERPRISE APPLICATIONS</th>
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<tbody>
<tr>
<td>SUPPLY CHAIN MANAGEMENT</td>
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<tr>
<td>ENTERPRISE RESOURCE PLANNING</td>
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<tr>
<td>CUSTOMER RELATIONSHIP</td>
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<tr>
<td>MANAGEMENT</td>
</tr>
<tr>
<td>KNOWLEDGE MANAGEMENT</td>
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<thead>
<tr>
<th>NETWORKING APPLICATIONS</th>
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<tbody>
<tr>
<td>VPN SOLUTIONS</td>
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<tr>
<td>WEB HOSTING</td>
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<tr>
<td>E-BUSINESS INFRASTRUCTURE</td>
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<tr>
<td>CALL CENTER/CTI</td>
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<thead>
<tr>
<th>CUSTOMIZED ENTERPRISE WAN SOLUTIONS</th>
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<tr>
<td>CUSTOMER-SPECIFIC NETWORK SOLUTION</td>
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<td>OPERATIONS SUPPORT</td>
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<tr>
<th>TRANSPORT</th>
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<tr>
<td>Frame Relay</td>
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<td>ATM</td>
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<td>X.25</td>
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<td>Private Line</td>
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<table>
<thead>
<tr>
<th>ACCESS</th>
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<tbody>
<tr>
<td>WIRELESS/TERRESTRIAL/SATELLITE/WIRELINE ACCESS</td>
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</tbody>
</table>

Source: Booz-Allen & Hamilton

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### Exhibit 2. Sample Emerging Vertical Solutions by Industry

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>SAMPLE BUSINESS CHALLENGES</th>
<th>SELECTED VERTICAL SOLUTIONS</th>
<th>EXAMPLES</th>
</tr>
</thead>
</table>
| **Financial Services** | • Strong competition driving need for differentiated service offerings while reducing operating costs  
  • Pressure to increase information transparency in managing the customer relationship | • Supply Chain Management  
  – Paperless document processing (e.g., Loan syndication) | • IntraLinks provides an application to collaborate and reduce paperwork for syndicated lending transactions |
|                        |                                                                                           | • Transaction Services  
  – Internet-based connectivity for cash management between banks and corporate clients  
  – Online foreign currency exchange transaction system | • SunGard Treasury Systems application streamlines cash management information flow between banks and corporations  
  • First Union Securities online FX provides a fully secure real-time foreign currency exchange |
| **Life Sciences/Pharmaceutical** | • Global M&A activity, alliances and partnerships to ensure product development portfolio  
  • Need for improved IT infrastructure to facilitate knowledge sharing  
  • Pressure to reduce operating cost through improved supply chain efficiencies | • Collaboration Tools  
  – Pharmainformatics information system | • Quintiles Transnational Corp. provides pharmaceutical companies access to an extended claims database using a web-based interface  
  • PharmasMarket.Com provides B2B tools for online auction, request for quotation (RFQ) and procurement functionality |
| **Computers**          | • Rapid understanding and integration of customer needs to adapt to marketplace and technology changes  
  • Operations flexibility to support globalization, high growth and short product life cycles | • Customer Relationship Management  
  – Technology assisted selling, marketing automation and field support (repair service) | • Fourthchannel provides solutions for high-tech manufacturers to create internet sales channels by connecting vertical exchanges, trading partners and back-end applications  
  • NewPryse collaborative B2B exchange helps companies to manage concurrent engineering, improving project tracking and knowledge sharing |

Source: Booz-Allen & Hamilton
winners are not yet established. In addition, market movements point towards vertical solutions — as ASPs are starting to target solutions to specific industries.

**Customer base leverage.** CyberCarriers already have a vertical customer base that can be leveraged as likely buyers of integrated, end-to-end solutions.

**Branding advantage.** Since CyberCarriers have control of all infrastructure capabilities (e.g., transport, access and data centers), they can more readily control the parameters necessary to guarantee performance levels for availability, reliability, scalability and security.

**Changing customer requirements.** Technology enhancements and Internet proliferation have created new challenges for established companies to change and/or improve their business models by leveraging the new technology.

Exhibit 2 (left) shows examples of emerging vertical solutions that address business challenges in specific industries. Many companies are developing solutions customized to vertical industry needs. However, our experience shows that the effective delivery of customized solutions in the context of a targeted vertical market strategy requires the development of a new set of capabilities.³

### 2) Delivery of End-to-End Vertical Solutions: Four Distinct Sets of Capabilities

Companies wishing to compete in the vertical solution space need to develop or acquire capabilities across the four areas of the vertical solutions delivery chain (see Exhibit 3). For CyberCarriers this means, at a minimum, developing a set of vertical capabilities required to serve/integrate with an ASP, and in the more aggressive scenario, developing and selling the solutions and providing the partnership management and

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Exhibit 3. Vertical Solutions Delivery Chain⁴

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integration role. The delivery chain activities are grouped into four areas:

**Solutions Provisioning** – consists of all activities related to the development of content and applications, e.g., application creation, development and upgrade, application administration and delivery tools. The key players in solution provisioning include independent software vendors (ISVs) and middleware vendors.

**Solution Distribution** – includes all activities around the delivery of the applications to the customers. The key components of solution distribution are data center hosting, co-location services, backbone transport and access services. The key players in this area include data center providers, network service providers (NSPs) and CyberCarriers that provide all services. Additionally, key enabling technologies for solution distribution are supplied by equipment providers, e.g., Sun, HP, EMC, Lucent and Cisco.

**Service Integration** – comprises all activities surrounding the integration and customization of the applications into the customer’s operations. Depending on the customization level, activities like business process analysis and design, aggregation services and customer-based integration could be required. The key players in service integration include traditional systems integrators.

**Customer Interface** – covers all the activities related to acquiring and managing the customer relationship. Examples of specific activities include customer support, training and billing. ASPs’ current responsibility encompasses all customer relationship related activities. However, activities like billing can be outsourced to specialized providers, e.g., Solect or Lucent’s Kenan Systems.

The key implications for CyberCarriers wishing to deliver a complete end-to-end vertical solution include:

- Ensuring end-to-end control of the infrastructure so as to enable a single point of contact and accountability for the solutions provided;
- Providing high levels of availability, reliability, scalability and security supported through SLAs to ensure customer and solution requirements are met;
- Developing capabilities for solution provisioning, service integration and customer interface by building, acquiring or partnering to provide a complete end-to-end solution to customers;
- Building application management capabilities to complement current infrastructure management capabilities; and
- Developing partnership management capabilities to manage the complexity of the range of players involved in offering end-to-end vertical solutions.

### 3) Delivering the Solution: Partnerships Are Key

Most players in the solutions delivery market have strong ties to at least one element of the value chain. As the market has matured, players have started to develop capabilities along a broader range of delivery chain elements for the purpose of providing end-to-end solutions. These capabilities are being developed internally in some cases and through acquisitions, partnerships and/or alliances in others. Given the importance of time-to-market and the potentially lengthy time to organically develop the full set of capabilities, we believe partnering is a compelling option.

Currently, four potential types of partners with different capabilities and positioning on the delivery chain exist for CyberCarriers to emulate (see Exhibit 4):

**Infrastructure Providers** – supply the solution distribution capabilities required to deliver the end-to-end solutions. Two trends are driving the positioning of the players in this segment to deliver complete solutions. First, the emergence of CyberCarriers that provide hosting and co-location
services (telecommunications and data center capabilities) to ASPs and ISVs, e.g., Equant. Second, data center providers that leverage their capabilities and partner with ISVs to deliver solutions are emerging as Infrastructure ASPs, e.g., USInternetworking and FutureLink.

**Independent Software Vendors (ISVs)** – provide solutions provisioning capabilities, such as vertical-specific applications. ISVs are leveraging their capabilities and developing hosting capabilities to provide end-to-end solutions directly to the customer. They are also known as ISV ASPs: Peoplesoft is one example. In a partnership, the vertical ISV provides the solution and deep industry knowledge and, most likely, some elements of the customer relationship. However, it is generally advisable for the partnership to develop capabilities to manage the end-to-end delivery of the solution, as well as the application hosting and management capabilities.

**Integrators** – provide the service integration capabilities. Traditional integrators are leveraging their customization capabilities, application expertise and customer relationships to enter the market. They also are partnering with infrastructure providers to deliver a complete solution, e.g., the KPMG and Qwest partnership.

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**Exhibit 4. Non-CyberCarrier Vertical Solution Players**

<table>
<thead>
<tr>
<th>INFRASTRUCTURE PROVIDERS</th>
<th>INDEPENDENT SOFTWARE VENDORS (ISVs)</th>
<th>APPLICATION SERVICE PROVIDERS (ASP)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value Chain Focus:</strong> Solutions Distribution Provide transport and network management capabilities, and data center/hosting</td>
<td><strong>Value Chain Focus:</strong> Solutions Provisioning Provide applications to address customer needs across vertical or for a specific industry</td>
<td><strong>Value Chain Focus:</strong> Customer Interface Provide integration of all value chain capabilities while focusing on the customer interface</td>
</tr>
<tr>
<td><strong>Trends:</strong></td>
<td></td>
<td><strong>Trends:</strong></td>
</tr>
<tr>
<td>• Emergence of CyberCarriers providing all infrastructure</td>
<td></td>
<td>• &quot;Pure&quot; ASPs do not own infrastructure or application</td>
</tr>
<tr>
<td>• Infrastructure ASPs leveraging own data centers and partnering with software vendors to offer ASP services</td>
<td></td>
<td>• Vertical ASPs target specific vertical markets, sometimes owning the application</td>
</tr>
<tr>
<td><strong>Examples:</strong> Equant, Global One, US Internetworking, Global Crossing</td>
<td><strong>Examples:</strong> Peoplesoft, Siebel, SAP</td>
<td><strong>Examples:</strong> Aristasoft, Corio, Maestro, Ciber</td>
</tr>
</tbody>
</table>

Source: Booz-Allen & Hamilton
When establishing a partnership with a system integrator, they provide integration/customization expertise and relationships with ISVs and customers. However, the partnership will likely have to develop the application hosting and managing capabilities for the whole solution.

**Application Service Providers (ASPs)** — focus on customer interface capabilities and partnership management to integrate all elements of the value chain. Two types of ASPs are emerging:

- First, “pure” ASPs own neither the infrastructure nor the applications, but focus instead on customer relationships and management of multiple partner relationships across the value chain, e.g., Aristasoft and Corio. As a result, partnership with a “pure play” ASP primarily augments the ASP’s partner portfolio to enable the full range of capabilities needed to deliver an end-to-end solution. The CyberCarrier typically provides data center hosting, backbone transport and access, while the pure play ASP provides the customer interface and partnership management capabilities in-house. The application and integration functions would most likely come through other partner capabilities.

- Second, vertical ASPs focus on specific industries and often own the applications they provide, e.g., Maestro. Partnering with a vertical ASP can cover all of the required capabilities to deliver an end-to-end vertical solution. The ASP brings deep industry knowledge and relationships in addition to management capabilities across the value chain.

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### Exhibit 5. Potential Partnership Models

<table>
<thead>
<tr>
<th>PARTNERSHIP MODEL</th>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
</table>
| CyberCarrier + Pure Play ASP | - Partner brings partner management skills  
- Partner brings depth of knowledge for the ASP market  
- Fast-to-market: ASPs already have relevant capabilities  
- Pure play ASPs are mostly new players unlikely to be competing for ownership of target customers  
- Significant learning for CyberCarrier | - CyberCarrier is only one of the many partners managed by pure play ASPs  
- CyberCarrier needs to make sure of its sustainable role in the partnership |
| CyberCarrier + System Integrator | - Partner brings service integration capabilities  
- Partner brings existing knowledge of applications and relationship with ISVs  
- Partner has industry knowledge | - CyberCarrier still needs to acquire application hosting and management capabilities  
- CyberCarrier still needs capabilities in managing the whole solution delivery chain  
- System integrators already have established relationships with vertical customers |
| CyberCarrier + Vertical ISV | - Partner brings application development knowledge  
- Partner brings depth of industry knowledge  
- Partner has a limited direct relationship with vertical customers | - CyberCarrier still needs to acquire application hosting and management capabilities  
- CyberCarrier still needs capabilities in managing the end-to-end solution delivery chain |
| CyberCarrier + Vertical ASP | - Partner brings partner management skills  
- Partner brings knowledge of the vertical ASP market  
- Fast-to-market: ASPs already have relevant capabilities  
- Significant learning for CyberCarrier | - Vertical ASPs tend to have deeper relationship with customers due to their in-depth industry knowledge  
- CyberCarrier is only one of the many partners that vertical ASPs manage  
- CyberCarrier needs to make sure of its sustainable role in the partnership |

*Source: Booz-Allen & Hamilton*
Potential Partnership Models

The development of productive partnerships represents a challenge to CyberCarriers. The customer solutions space requires more than “paper” partnerships: effective delivery of value requires a seamless integration of capabilities across partnering organizations. Four prominent partnership models have emerged: CyberCarriers partnering with a pure play ASP, a system integrator, a vertical ISV or a vertical ASP. Exhibit 5 (left) details the advantages and disadvantages of each option.

While no one model fits all, clearly some models will be more or less appropriate depending on the value specific partners are bringing to the table. For example, from our experience, in cases where a CyberCarrier is bringing its own customer account portfolio to the table with a desire to maintain ownership of the accounts, a large system integrator would not be a natural partner given the latter’s typical focus on owning the client relationship. In such an instance, a pure play ASP or vertical ISV partnership would make more sense.

4) Operationalizing the Vertical Strategy

To assume a leading role in delivering a complete solution, CyberCarriers need to develop a structured approach for implementing their verticalization strategy. In our experience, several key steps should be followed as an operator moves from strategic planning to implementation stages. These steps are discussed in more detail below.

Strategic Planning Stage

In the strategic planning stage, the CyberCarrier determines the business model that best matches its capabilities and aspirations, using the following four-step process: identifying the vertical industries and solutions to target, detailing the requirements, performing a gap analysis and identifying potential partners to fill gaps.

A) Identify Vertical Solution Opportunity

To initiate strategic planning, the CyberCarrier must first identify what solution sets it will offer and to whom. Attractive vertical industries are identified, and specific solutions within the verticals are chosen. An overall strategy is then selected based on multiple solutions and/or industry considerations.

- Identification of Attractive Verticals. Attractive industries are those that demonstrate a good market opportunity, as well as characteristics that allow easy value capture. This step in the process requires an understanding of the CyberCarrier’s strategic intent (e.g., geographic scope, customer segment focus) in addition to the nature of the different potential vertical industries.

- Identification of Solutions Within the Verticals. First, the CyberCarrier must understand the specific business challenges of the industry, and further, which of those challenges can best be addressed through technology-based solutions. Based on this understanding, existing gaps in the industry’s typical capabilities are identified, along with specific solutions appropriate for outsourcing to firms in the industry. (For example, in the high-tech manufacturing industry, a U.S. component manufacturer might require a digital link to its plant in Taiwan for communicating production ordering needs over a geographically dispersed area.) Second, the CyberCarrier needs to understand the required network capabilities to deliver the
identified solutions. As an example, certain solutions require a great deal of specialized security or network performance-enhancing features to ensure reliable delivery.

**Overall Strategy Selection**

Excluding niche software vendors, most entities moving into the end-to-end solution market will not focus on just one vertical solution for one industry: they will either play up their vertical industry expertise as their value proposition and offer multiple solutions, or they will focus on their solution provision expertise and span industries—or some combination of the two (see Exhibit 6). We believe the latter option is more attractive, as it leverages economies of scale and industry-specific experience curves.

**B) Understand Requirements for Solutions To Be Offered**

The next step in strategic planning is to understand the specific requirements for offering each target solution. At the most basic level, the CyberCarrier needs to understand the application intent itself. One key level of understanding for the CyberCarrier is knowing the key stakeholders and understanding the information flows between them. The information flows need to be characterized in terms of the time-sensitive nature of the data, the size and frequency of file exchange, the sensitivity of the data, and the importance of the data to the stakeholders’ respective missions. These characteristics help determine the specific networking and operational capabilities that must be in place to allow the information flows to occur reliably and securely.

The network capability requirements primarily include:

- **Data Centers.** These are the physical structures where data and applications are stored and managed. While all major companies maintain data centers, CyberCarriers provide a cost-effective and secure means to outsource data hosting and to access required applications. Further, depending on the degree to which an industry leverages the Internet, web hosting functions can be provided to extend the enterprise’s global presence.

- **Backbone Transport.** This is presumed to be the CyberCarrier’s specialty. Different applications will require greater levels of bandwidth, service and/or network security. Key to leveraging these assets are the support systems and infrastructure needed to ensure that capacity can be applied to ensure user content and applications are able to perform as designed.

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**Exhibit 6. Vertical Solution Offering Scope**

<table>
<thead>
<tr>
<th></th>
<th>SINGLE SOLUTION</th>
<th>MULTIPLE SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SINGLE VERTICAL</strong></td>
<td>Unlikely scenario for a CyberCarrier, as it will not produce a large enough market to cover costs</td>
<td>Leverage industry experience in delivering multiple solutions – primarily driven by marketing</td>
</tr>
<tr>
<td><strong>MULTIPLE VERTICALS</strong></td>
<td>Vertical-customized solutions can allow rapid access to multiple verticals and require minimal partnerships, but they may dilute marketing advantage from industry focus</td>
<td>Full implementation of multiple vertical-customized and/or true vertical solutions. This will dilute the industry focus message and may be difficult to gather the resources to implement successfully</td>
</tr>
</tbody>
</table>

*Source: Booz Allen & Hamilton*
• **Access.** A plan for last-mile access to the customer must be in place. The CyberCarrier must analyze the capabilities of its own (or its partner’s) access network to determine what capabilities it will support (similar to the backbone). As many CyberCarriers rely on regional wholesale service providers to deliver last-mile connectivity, in some cases this can be a weak link in their solution delivery capabilities. As a result, this is another realm in which vendor management and management platforms are a key element of success.

The operational capability requirements typically include:

**• Back Office/Customer Care.** The advantage of vertical solutions is based on customer focus. Plans for monitoring the solution provision and providing customer support should be in place. However, customer control is a large issue in revenue capture, and the CyberCarrier will want to develop this function internally, if possible, as it is a primary source of contact with the customer. As a result, one key success factor is being able to effectively link the applications and network management platforms to provide an integrated customer-level view of overall performance.

**• Application Development.** An independent software vendor will probably be the one providing the actual solution, whether enterprise software or e-business solutions. For example, I2, Manugistics and Oracle all provide supply chain management software solutions that can be implemented via an ASP.

**• Consulting/Web Design.** Customization for the individual company is currently a critical component of providing a vertical solution. Traditionally, consultants or professional integrators have done this work. A successful vertical approach will depend on being able to reduce company-specific customization to minimum levels by providing the application schemas and data structures required to support key functions typical of industry corporations.

**• Sales Force and Marketing.** This is a critical operational element that must be in place. The sales force should be oriented around the vertical industries, possibly by solution set. There may be further segmentation based on region or company size.

C) **Perform Gap Analysis**

Once the capability requirements have been identified, the next step is determining what the CyberCarrier can/cannot deliver, given its existing capabilities. This is a straightforward process that requires the CyberCarrier to determine its capabilities, assess them against solution requirements, and identify and detail any gaps.

These gaps will then guide the strategic direction, as the CyberCarrier decides how to fill them in order to provide a solution. Thus, the gaps are a key driver for selecting partners for the solution fulfillment process.
D) Partnership Model and Partner Selection

The key criterion in selecting a partnership model is the ability of the partnership to fulfill solution requirements. Different types of partnerships will deliver different breadths of capabilities. Other criteria can be used in conjunction with this to try and identify the model type. For example, the level of customer ownership that the CyberCarrier can achieve in a partnership is often a critical strategic measurement.

In Exhibit 7, the partnership models are ranked according to these two attributes. Partnering with a pure play ASP offers a high solution fulfillment and a decent chance at customer ownership (i.e., the ASP doesn’t have industry expertise, so it will be less able to hold vertical clients captive). This model is an appropriate strategy for implementing a vertical-customized solution that can be leveraged across multiple verticals. The vertical ISV partnership also allows customer control, but its solution fulfillment is somewhat lower, since the application management piece is not in place. However, a staged approach would entail implementing the first partnership, leveraging the ASP learning and then applying it to the second partnership in a staggered start.

Once the model is chosen, the specific partner within that group is then selected. Three main sets of criteria can be used to surface the best partners for the CyberCarrier to team with to provide end-to-end vertical solutions:

- **Fit with Capability Gaps** — involves assessing how the potential partner fills the network and previously identified capability gaps.
- **Strategic Fit** — looks at the potential partner’s vertical focus, product portfolio, value proposition, alliances and strategic alignment.

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**Exhibit 7. Partnership Model Selection Example**

Source: Booz-Allen & Hamilton
reorient the organization to support a vertical sales strategy; develop an initial pilot; and, finally, roll out the full offering.

A) Develop Sustainable Partnerships

Developing a partnership plan requires understanding the desired partnership structure and then implementing it. Once the candidate has been contacted, the steps outlined in Exhibit 8 (below) should be taken.

B) Build Vertical Solution Sales Organization

Building the sales organization focuses on developing and operationalizing internal and external sales and marketing plans. A fundamental issue is whether or not the firm wants to reorganize its entire organization around sales channels (in this case, direct sales force focused by vertical) or just

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**Exhibit 8. Key Tasks To Develop a Sustainable Partnership**

<table>
<thead>
<tr>
<th>KEY TASKS</th>
<th>SUMMARY DESCRIPTION</th>
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</table>
| Perform due diligence on potential partners   | Upon contact with the potential partner, a cooperative information exchange will reveal additional information needed to evaluate the viability of the partnership from the CyberCarrier's point of view. Criteria of note include:  
  - Financial position  
  - Business strategy  
  - Key management personnel and background  
  - Customer references  
  - Strengths and weaknesses  
  - Additional constraints |
| Develop negotiation strategy                  | Given the information gained from the due diligence, if the partnership still looks attractive, the CyberCarrier must review and understand negotiation levers for the partner, model the costs involved in the partnership, and develop and execute a strategy to maximize its own interests, while still allowing a win-win partnership. |
| Develop a partnership structure               | During the negotiations, both partners must understand and agree on:  
  - Cost to serve for solution delivery, including implementing pricing approach  
  - Rules on revenue sharing  
  - Rules on customer ownership  
  - Front-end and/or back-office cooperation and support arrangements  
  - Participation/strategic alliances rules  
  - Participation in alliances with third parties |
| Design and operationalize a partnership management control system | Finally, the partners should agree on certain issues for the ongoing operational management of the solution delivery:  
  - Partnership organizational structure — communications point of contact  
  - Lines of authority  
  - Points of accountability  
  - Dispute resolution  
  - Partnership performance metrics  
  - SLAs and associated benchmarks |

Source: Booz-Allen & Hamilton
to ramp up sales capabilities. Regardless, the sales force and marketing plan must be in place to exploit the advantages of having a vertical solution focus. (See Exhibit 9 for a detailed task list.)

C) Develop Vertical Solution Pilot

In order to actually implement and test functional capabilities, the CyberCarrier and its partner(s) should identify beta (trial) customers and deliver a pilot solution, presumably at a reduced cost. The pilot will be a key mechanism for refining the CyberCarrier’s approach to launching the vertical solutions in the market. The specific actions to launch the pilot, as well as the final, complete functional implementation of the solution strategy are described in Exhibit 10 (above right).

D) Full Rollout

Assuming a successful pilot program, the final step is simply to execute the marketing plan and solution delivery strategy and to follow the strategic sequence identified for multiple solutions.
The demand for full-service delivery of network hosting and transport services is exploding. Those companies that best configure robust, yet cost-effective, integrated platforms for meeting existing and future demand will have excellent prospects for long-term success. While there are several routes by which CyberCarriers can assemble such platforms, there are important considerations specific to any approach that must be fully and accurately addressed and implemented. Astute evaluations of the desirability and feasibility of vertical and horizontal service offerings are critical considerations for any CyberCarrier strategy. Those companies that best understand and overcome these strategic and operational challenges are those with the strongest chance of evolving into the telecommunications winners of the future.

Exhibit 10. Tasks To Develop Vertical Solution Pilot

<table>
<thead>
<tr>
<th>KEY TASKS</th>
<th>SUMMARY DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Evaluate which vertical-focused solution to use for the pilot</td>
<td>• List of vertical market priorities (assuming multiple industries)</td>
</tr>
<tr>
<td></td>
<td>• Matrix of pros and cons of early implementation of different vertical-focused solutions (assuming multiple solutions)</td>
</tr>
<tr>
<td></td>
<td>– Based on capabilities and identified partnerships</td>
</tr>
<tr>
<td></td>
<td>– Differentiated by vertical markets</td>
</tr>
<tr>
<td></td>
<td>– Identification of benefits that can be gained and leveraged by launching each solution</td>
</tr>
<tr>
<td></td>
<td>• Solution launch schedule</td>
</tr>
<tr>
<td>• Develop vertical solutions specifications (in conjunction with partner(s))</td>
<td>• Solution Development Plan (SDP)</td>
</tr>
<tr>
<td></td>
<td>– Solution Requirement Specification (SRS)</td>
</tr>
<tr>
<td></td>
<td>– Solution Design Document (SDD)</td>
</tr>
<tr>
<td></td>
<td>– Integration schedule (time required, not dates)</td>
</tr>
<tr>
<td></td>
<td>– Test plan</td>
</tr>
<tr>
<td>• Implementation</td>
<td>• Actual functional implementation of the solution</td>
</tr>
<tr>
<td>• Identify potential pilot clients</td>
<td>• Design a list of potential beta customers</td>
</tr>
<tr>
<td></td>
<td>– Segmented by solution and vertical industry</td>
</tr>
<tr>
<td></td>
<td>• Select a few</td>
</tr>
<tr>
<td>• Test 1-2 potential clients</td>
<td>• Pilot product launch</td>
</tr>
</tbody>
</table>

Source: Booz Allen & Hamilton
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