

# Profiting from the Uncertain Business Models of the Anywhere Network

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By  
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Before Yankee Group, Dr. Marshall worked in various engineering operations, software design, research, due diligence and strategic planning roles in New Zealand, Mexico, Indonesia and Thailand. Dr. Marshall also cofounded a software company specializing in the development of database applications and was an electrical engineer at BHP New Zealand Steel.

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## Executive Summary

The media and communications industries are in chaos. Traditional business models are being severely disrupted as new innovations emerge and take advantage of the low market entry barriers created with Internet Protocol, MPEG and for internet browser technology. **Anywhere Network™** is a framework for navigating the developing chaos and profitably delivering services to the Anywhere Consumer™ and Anywhere Enterprise™.

The Anywhere Network is Yankee Group's vision of a seamless and always-accessible intelligent infrastructure that provides a connection for everyone to everything from anywhere. Internet connectivity moved this control to companies such as eBay, Google and Yahoo! The framework also encompasses community-led and user-centric solutions, which affords the users increased autonomy, service variety, flexibility and personalization. Exhibit 1 (on the next page) illustrates the variety of existing and emerging business models that could be affected by the evolution of the Anywhere Network toward user-centric solutions.

In particular, the Anywhere Network:

- Will demand carriers implement solutions that increase the intrinsic value derived from distribution capabilities of their networks.
- Will drive commerce-centric solutions to support an increased demand for ad-hoc community and ultimately peer-to-peer transactions.

### What Is the Anywhere Network?

The **Anywhere Network** is Yankee Group's vision of a seamless and always-accessible intelligent infrastructure that provides a connection for everyone to everything from anywhere.

- Is destroying traditional media-centric business models.
- Will demand interoperability between competing solutions for VoIP and instant messaging that will drive the obsolescence of proprietary solutions.
- Has enabled search-centric solutions to firmly establish themselves in the early phase of the Anywhere Network and garner significant success with advertising revenue support. However, it will see it become increasingly commoditized with the increased need for standardized search capabilities throughout all facets of the Anywhere Network.
- Will see the proliferation of community-centric solutions as the Anywhere Consumer seeks greater specificity and control over the services delivered over the Anywhere Networks.

*The Executive Summary continues on next page.*

Media and communications industry regulators face the challenges of the market conditions created by the Anywhere Network. Policy makers are grappling with the migration of legacy network centric regulations, appropriate regimes to anticipate service evolution and appropriately manage the efficient use of scarce resources such as radio spectrum, and ensure that there is sufficient market competition to benefit the Anywhere Consumer.

**Exhibit 1. Business Models Collide at the Intersection of Digital Media, Communications and Internet Communities**

Source: Yankee Group, 2007



## Introduction

The media and communications industries appear to be in chaos. Traditional communication service providers are fighting market decline with convergence strategies—attempting to fend off disintermediation from internet upstarts like Skype. Internet and media players such as eBay, Google and News Corp are making lofty investments in unprofitable companies such as Skype, MySpace and YouTube. Apple recently made a big splash with its overpriced iPhone, and companies offering media and social networking application seem to be capable of achieving massive market scale overnight, albeit with dubious standalone business models.

This chaos will accelerate and become increasingly disruptive as players capitalize on pervasive and open technologies such as Internet Protocol (IP), internet browser, IT virtualization and media standards such as MPEG.

Players across the value chain will be disrupted as new industry models emerge. Telecom service providers and software vendors such as Microsoft are struggling because it destroys the traditional value of the network and software lock-in techniques they have vigorously pursued. Google and Skype, beneficiaries of the early phases of the Anywhere Network, are under threat from later entrants that take can also

advantage of the low barrier to market entry that is the hallmark of the transformation.

What is going on here? Yankee Group calls this disruptive transformation the next global connectivity revolution as the world moves to the Anywhere Network. The Anywhere Network is Yankee Group’s vision of a seamless and always-accessible intelligent infrastructure that provides a connection for everyone to everything from anywhere.

The Anywhere Network provides a guide for profitably delivering media, communications and internet-based services in support of the ever-increasing needs of the Anywhere Consumer and the Anywhere Enterprise. Its

characteristics vary between markets and market segments. For example, solutions that enable low-cost basic communications services in the short to medium term are the priority in nascent emerging markets. This contrasts with mature markets where basic communications are well established and the convergence of media and communications is a more significant consideration for opportunities with the Anywhere Network.

This Yankee Group Report focuses primarily on the evolution of the Anywhere Network in mature markets and segments of emerging markets where the convergence of media communications and internet services is ripe. An analysis for economically emerging markets, which focuses on the delivery of low-cost communications, will be the topic of a future Yankee Group Report.

At the heart of the Anywhere Network are business models emerging as a result of key technology and market innovations. This report develops a framework for navigating the emerging variety of the business models illustrated in Exhibit 1 (on previous page), with particular emphasis on their current and emerging characteristics.

## Business Model Uncertainty Arises from Anywhere Network

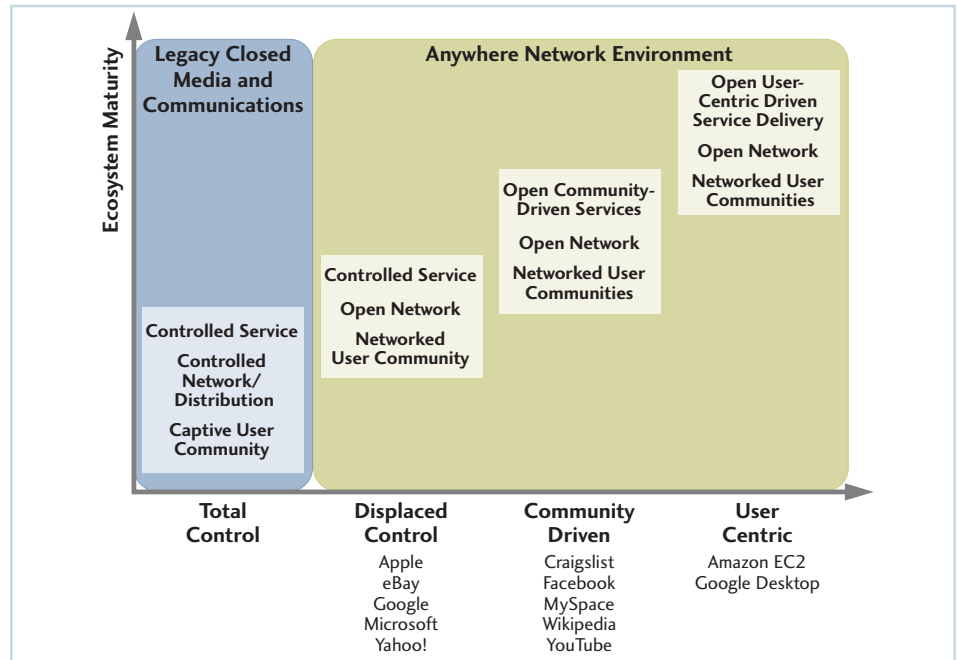
The Anywhere Network exposes existing business models to disruption in the process of enabling new models to flourish. As the Anywhere Network evolves, it continuously liberates the Anywhere Consumer and Anywhere Enterprise from business models that aim to profit from exercising control over the user experience. Exhibit 2 shows that this liberation process progresses from total through displaced to community-driven and, ultimately, user-centric control. The Anywhere Network environment encompasses the various business model phases that capitalize on the open internet environment. Only with a deep understanding of the Anywhere Network and its effect on the Anywhere Consumer and Anywhere Enterprise will players escape the calamity and profit from the phases of ecosystem maturation illustrated in Exhibit 2.

During the Total control period, dominant telecom and media companies benefited from closed networks and captive user communities, for whom they controlled the delivery of services. The unleashing of an open internet and standardized browser technology allowed players like eBay, Google, Microsoft Skype and Yahoo! to offer Displaced control services such as online auctions, internet search, infotainment and messaging services with vertically integrated service delivery platforms. These solutions displace the control from the network to the service delivery layer, using highly proprietary and vertically integrated service delivery technology with sophisticated portal-based user interfaces.

A hallmark of the Anywhere Network is the low barrier to market entry that enables the proliferation of a seemingly infinite variety of

**Exhibit 2. The Anywhere Network Evolution Drives a Business Model Revolution**

Source: Yankee Group, 2007



services and applications. In the past, these services and applications were implemented using vertically integrated service-delivery silos. Vertical integration is necessary to support nascent services and applications that standards-based architectures cannot support. However, these solutions present challenges for the Anywhere Consumer.

The Anywhere Consumers are now locked into the vertically integrated services. But as users become more demanding and seek a wider variety of offerings, the providers' challenge is to offer broad service delivery applications that are suited to the mass market. The recent "Peanut Butter Manifesto" article in the Wall Street Journal articulates the challenges Yahoo faces supporting a wide variety of services with a vertically integrated market strategy.

Community-driven solutions continue to be supported on vertically integrated service delivery infrastructure, but the media and services delivered over this infrastructure are facilitated by like-minded communities, typically with the service being essentially user generated. Early communities, such as craigslist, LinkedIn, Plaxo, Facebook, MySpace and YouTube, focus on managing local advertisements, contact details and user-generated media. The accelerated growth in these solutions shows the value that comes from federating services to like-minded communities. Google and News Corp recognize this value and, with acquisitions of YouTube and MySpace, respectively, are looking to complement their existing offerings with community-driven solutions.

**As Anywhere Consumers become increasingly sophisticated, they will seek greater autonomy and control over the manner in which media, services and applications are delivered.**

As Anywhere Consumers become increasingly sophisticated, they will seek greater autonomy and control over the manner in which media, services and applications are delivered. This will drive the need for services and application personalization of the user's context and efficient management of the lifecycle of services and applications as needs change. This emerging User-centric category offers massive upside market opportunities.

Early implementations of user-centric offerings such as Google Desktop and Amazon Elastic Compute Cloud (EC2) provide early (and relatively rudimentary) illustrations. Google's Desktop application enables users to federate services and applications in a single portal environment. Although there is some personalization, the structure of the services and applications are relatively static. Amazon EC2 offers virtualized grid computing capabilities that offer flexible, user-provisioned computing capabilities. Others such as HP, IBM and Sun have offered similar solutions. However, these are not as versatile and tend to be targeted at large enterprises. The intrinsic value providers that offer community-led and user-centric solutions derive depends on the extent to which they liberate the Anywhere Consumers' experience.

## Monetizing the Anywhere Network

The emergence of the Anywhere Network and the displacement of control from traditional media and communication providers also shifts the monetization of services and applications they offered. Although traditional providers continue to seek subscription funds, emerging business models that derive revenue from independent sources, such as advertising, have emerged and continue to evolve. Players such as Google have mastered pay-per-click advertising, while others such as Yahoo! have been more effective in branded advertising. Major players hope the emerging Anywhere Network business models—and the associated convergence between media, communications and the internet—will create revenue that will offset subscriptions.

Although Google and Yahoo! see the lion's share of their growing revenue coming from advertising, upside opportunities for advertising in other sectors of market are unclear. For example, the large MySpace and YouTube communities seem to be prime targets for advertising but these communities filled with young members tend to be fickle with limited disposable income—not necessarily ideal advertising targets.

Because only 3% to 4% of total advertising expenditures globally are internet based, there appears to be significant upside potential. Communication providers hope they can capitalize on personalization and user behavioral characteristics to offer targeted advertising. But, to succeed, targeted advertising strategies require vastly increased sophistication, particularly in the case of premium advertising.

As disruptive business models continue to emerge under the Anywhere Network umbrella, business models for monetizing services will come and go. For example, Apple currently derives the lion's share of its music business profitability from iPod devices. Apple cannot sustain this model indefinitely. Similarly Google was unprofitable before it launched its advertising-supported internet search model. In general the effective monetization of services, whether through direct subscriptions, ad-supported or campaign-type offerings, will depend primarily on the scale, consistency and reliability of the underlying service offerings. Important considerations when evaluating business models include:

- Are there obvious direct and indirect revenue streams that can be derived from the service? For telephony, cable and broadband services, for example, this could mean revenue sharing associated with e-commerce transactions or pay-per-click type advertising models. These revenue streams tend to be associated with specific transactions as opposed to less tangible brand-led initiatives.
- Is there a consistent service offering and usage model that has intrinsic value and can be monetized in its own right—or by a third party with a parallel revenue—or value-generating capability, such as sophisticated indexing and cataloging of existing offerings?
- Are the multiple identities and profiles of the Anywhere Consumer managed in a unique way? These might include a variety of trusted party security solutions and techniques for service brokering.
- To what extent can providers combine profitable services with others that lack standalone business models to magnify the aggregate intrinsic value of the service offered to the subscriber?

## Business Model Division Over the Anywhere Network

As Exhibit 1 illustrates, there are a wide variety of service offerings and associated business models emerging under in the Anywhere Network. To understand the evolution of the Anywhere Network through the various stages of development, we'll investigate the existing and emerging business models associated with the Anywhere Network. In addition, we'll look at their traditional and emerging control points in the value chain, their prospect of survival as a category, and the various technology and market innovations that they must implement to capitalize on opportunities with displaced control and self-service paradigms. We will discuss the enterprise- and consumer electronics-centric business models in subsequent Yankee Group reports.

**Carrier-centric business models rely on closed networks and service delivery environments that exert significant control on subscribers. The Anywhere Network will ultimately destroy these business models.**

## Carrier-Centric Solutions

Carrier-centric solutions provided by major telecommunication providers that own and operate massive facilities based network infrastructure, such as China Mobile, Sprint, Verizon and Vodafone, garner the bulk of their present-day \$2.7 trillion revenue from traditional circuit switched telephony services.

Carrier-centric business models rely on closed networks and service delivery environments that exert significant control on subscribers (i.e., the total control category in Exhibit 2). The Anywhere Network will ultimately destroy these business models. The internet has already created an open environment to allow the delivery of an abundance of internet-centric services, such as search and e-commerce, over the telecommunication networks without carrier intervention or control. More recently, peer-to-peer VoIP services, offered by companies such as Skype, have enabled the delivery of voice telephony services over the internet at a fraction of the price carriers traditionally charged.

These innovate services achieve global reach with relative ease and distribution over a variety of fixed and broadband networks. Until recently mobile networks had not enabled an open internet environment because of network performance and difficulties in delivering services to mobile devices. Higher bandwidth networks, data-enabled laptops, devices with standardized operating systems, fixed mobile and media convergence initiatives, and the emergence of access technologies such as 3G and WiMAX, are enabling the mobilization of the internet.

As the Anywhere Network evolves, carriers must establish business models, deploy associated technologies and develop service distribution strategies to capitalize on the business models that arise from displaced control. The business models might focus on offering wholesale and retail network connectivity—relying on others to enable services over the networks. Or they may play a greater role in the service enabling process. Because most carriers resist the notion of being bit-pipe providers, the analysis emphasizes their active role as a service provider (or, more appropriately, a service enabler).

The challenge for carriers is in profitably transitioning their business models, market strategies, and capital and operational investments. They must pay more attention to areas where they can differentiate, such as monitoring and managing service distribution, and complex and dynamic business process management. Exhibit 3 illustrates that transition.

To profit from the displaced control, carriers must harness the existing and emerging capabilities in their service delivery, network and service distribution solutions. Carriers must either optimize their business models for wholesale network operations, or alternatively create an efficient means for federating internet and other dedicated third-party (off-net) services and applications while they drive cost down and add advanced functionality to their offerings. In both cases, carriers must focus on driving service offering beyond an intermediate displaced control approach to a completely user-centric orientation. In doing so, carriers must capitalize on context awareness, such as device and access network type, location and presence, media category and subscriber profile.

To succeed, carriers must carefully prioritize their technology investments to simultaneously deliver their traditional services economically and capitalize on the opportunities the Anywhere Network

creates. To achieve this, carriers are essentially serving two masters. One master requires that the traditional best-of-breed services are delivered efficiently and is optimally addressed with vertically integrated service delivery solutions. The other requires the federation of a breadth of services, which requires horizontally integrated service delivery solutions.

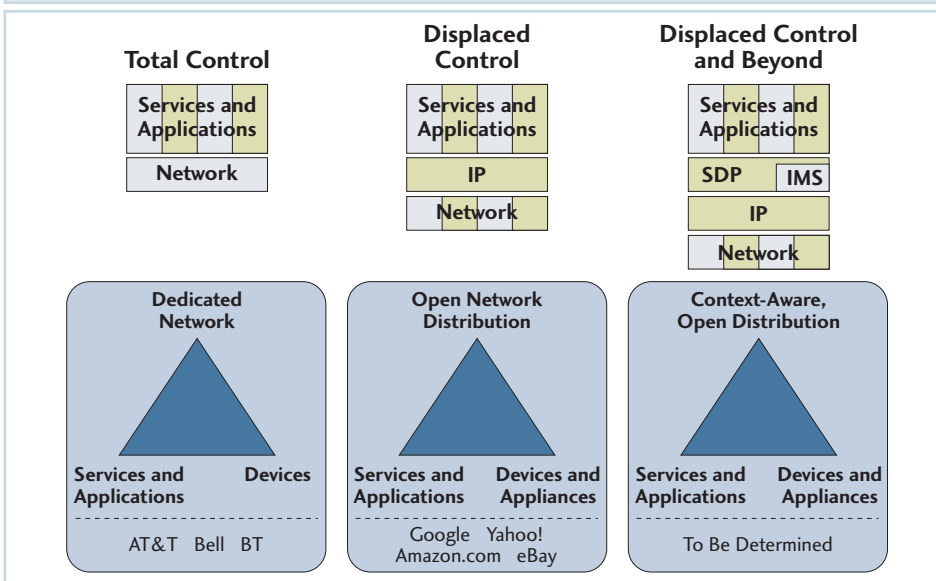
### Commerce-Centric Solutions

Companies such as eBay and Amazon, which provide online e-commerce portals for third parties to buy and sell merchandise, support commerce-centric solutions. These companies capitalize on the global reach of the internet and extend the span of distribution they can manage and control. The persistent fragmentation in the e-commerce market coupled with intense competition from specialized e-commerce and brick and mortar companies, and the continued need for managing logistics, provoke players such as Amazon and eBay to continue developing solutions that extend the variety of merchandise they offer, improve communication and business process capabilities, and lower overall transaction friction. See Exhibit 4 (on the next page) for an illustration of the areas of strategic importance in the e-commerce value chain:

- **Third-party plug-ins** facilitate integration with existing customers, managed e-commerce services, and enable new transaction orientated applications to be efficiently implemented in A2P, P2G and P2P environments.
- **Transaction management capabilities** aimed at managing electronic transactions over the Anywhere internet. Transaction management capabilities will evolve in lockstep with functionality created by third-party plug-ins.

**Exhibit 3. Anywhere Creates Opportunities for Openness in the Process of Destroying Closed Carrier Silos**

Source: Yankee Group, 2007



- **Integration between Anywhere Network and bricks and mortar** includes logistical functions, such as the delivery of merchandise, and must incorporate both business process and communications capabilities (such as Skype and instant messaging), particularly as transactions become increasingly ad hoc.

### Traditional and New Media-Centric

Traditional media-centric businesses cover a broad range, including: Dow Jones and News Corp, which offer print and online information centric media; cable companies such as Comcast; and media content publishers and distributors such as Disney and Time Warner. These players historically enjoyed significant control over the development, aggregation, rendering and distribution of media and entertainment services. Leveraging their market control in conjunction with the quality of their content, brand and they audience developed lucrative revenue streams from subscriptions and advertising. These models are under considerable pressure as the Anywhere Network begins to take hold.

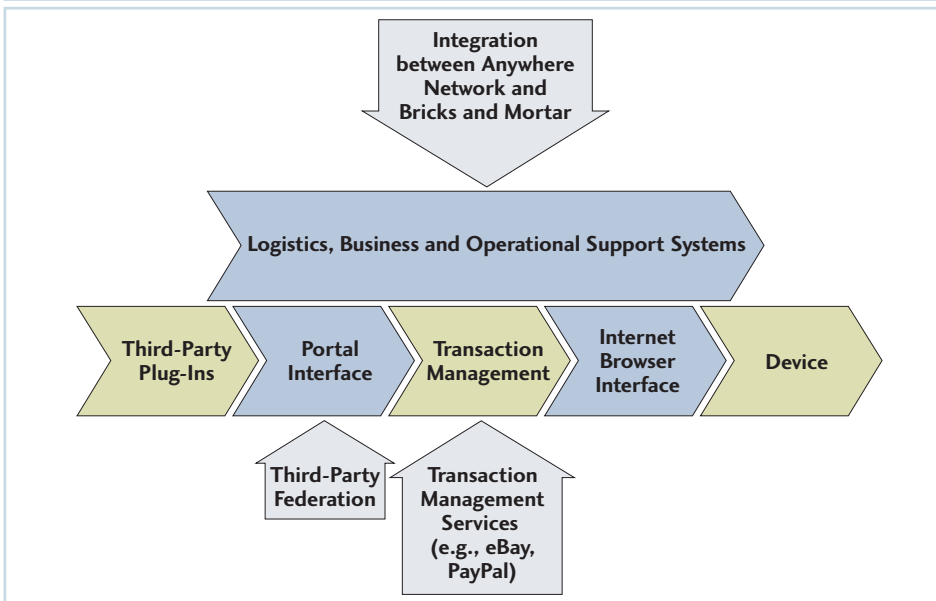
**Virtually every service and application delivered over the Anywhere Network incorporates digital media of some kind. This significantly disrupts media-focused players and has pushed the entire value chain to develop innovative solutions that encompass media in some shape or form.**

The combination of ubiquitous communications, access-independent service delivery, low-cost and diverse media aggregation and distribution methods has spawned competitive media sources. These range from community-based solutions such as MySpace, YouTube and blogs to music-sharing sites such as LimeWire and media-sharing solutions such as BitTorrent. Apple capitalized on the early digital content distribution solution offered by Napster and disintermediated the music industry with its vertically integrated iTunes solution. Because the lion's share of Apple's profitability in this area comes from selling iPod devices rather than the music content—it is not beholden to revenue share arrangements with content providers, and disrupted traditional content-centric business models for music distribution that were based on the physical distribution of digital content on compact discs. As large media providers lose control over their traditionally captive markets, revenue from subscriptions and advertising have fallen significantly. The Anywhere Consumer is spoiled by choice and at the same time overwhelmed by the variety of media and entertainment services and the excess of information available on the Anywhere Network. In some cases, consumers are opting for solutions that were not developed for monetary purposes.

Virtually every service and application delivered over the Anywhere Network incorporates digital media of some kind. This significantly disrupts media-focused players and has pushed the entire value chain to develop innovative solutions that encompass media in some shape or form. Google focuses on harvesting digital and video content, combining the content with its robust search capabilities and communities to broaden its advertising revenue. Carriers are implementing solutions such as IPTV, mobile TV and partnering with companies such as Apple to deliver content and video services over their

**Exhibit 4. Strategic E-Commerce Hooks in the Face of Stiff Competition**

Source: Yankee Group, 2007



networks. Sling Media and others are capitalizing on their ability to redirect video media from set-top boxes to the internet. And companies such as Amazon have extensive catalogs of digital media that they distribute from their e-commerce portal. News Corp made a series of strategic acquisitions, including MySpace, expanding its portfolio from the traditional to the new media domains. News Corp, in conjunction with key partners such as Google is also exploiting the MySpace community to bolster its media distribution and advertising capabilities.

New media will infiltrate the variety of services and applications enabled by the Anywhere Network. Traditional and new media players must aggressively integrate sophisticated media search, management, integration and personalization capabilities, user-generated and premium content, communication and transaction capabilities that rival those offered by specialist providers. The Anywhere Consumer will utilize an ever-increasing volume of media and benefit from its integration with other complementary functionality. At the same time, the market will be surprised how users consume these integrated services. For example, the vast majority of music video downloads from Apple's iTunes are viewed on PCs and laptops rather than an iPod. According to Nielsen Media Research, Video iPod users consume video 11% of the time.

Digital rights management (DRM) and copyright continue to be major issue as media is unleashed over the Anywhere Network. Media distribution through social networks and peer-to-peer connectivity will tax traditional approaches to DRM and copyright management. It will drive careful evaluation of the intrinsic value of the underlying media and content versus the manner in which it is delivered. Because the social networks tend to disrupt traditional subscription-based distribution models, indirect revenue sources from advertising, e-commerce and other transactions will become critical.

## Communications-Centric Solutions

Communications will continue to be an integral function of the Anywhere Network. Social networks and communities have shown the potential of peer-to-peer connectivity and communications. Communications was once the sole domain of telecom network operators with carrier-centric business models. The openness of the internet, the proliferation of VoIP and instant messaging technologies paved the way for a new breed of communications to emerge in the internet environment. Companies such as Vonage have a very similar business model to traditional carriers, but designed their technology and operations from the outset for VoIP. These companies offer competitive plans and packages similar to traditional telcos and more recently cablecos that offering bundled telephony services. Players such as Skype and Yahoo! offer peer-to-peer VoIP solutions, which, by offering low-cost services that capitalize on global internet connectivity, significantly disrupt the underlying business models of the traditional carriers. Through viral adoption, Skype reached 136 million subscribers at the end of the third quarter of 2006, less than 5 years after being established.

The communications solutions offered by players such as Skype illustrate the benefit of bringing communications and messaging capabilities to captive communities. As the Anywhere Network continues to mature, personalized and access-neutral communications capabilities will become standard within the Anywhere Network business models. As this occurs, Anywhere Network users will come to expect the availability of interoperable peer-to-peer VoIP and IM capabilities, leading to the eventual commoditization of technologies that support them. With Skype, eBay has a powerful communications-centric asset that provides a competitive differentiator for the near term. Skype functionality, which eBay acquired for \$2.5 billion in 2005, will be commoditized within the next 24 to 36 months.

**The Anywhere Consumer will utilize an ever-increasing volume of media and benefit from its integration with other complementary functionality. At the same time, the market will be surprised how users consume these integrated services.**

## Community-Centric Solutions

Community-centric solutions incorporate offerings ranging from blogs to a variety of structured social and commercial networking applications where much of the content is user generated. Blogs are the most widely adopted community-centric solutions today. They are easily applied to the traditional internet allowing ad-hoc interactivity. Other community-centric solutions offered by LinkedIn, Facebook, Plaxo and XING, enable subscribers to coordinate and expand their contact networks for personal or business purposes. These solutions help members identify and contact former college friends or previous work colleagues. Solutions support personal-generated content such as pictures and videos, and other functionality including targeted job advertisement outreach. These companies create viral networks of like-minded individuals by allowing friends and business acquaintances to share contact information. Facebook has more than 40,000 virtual networks in which users affiliate with a particular community. MySpace and YouTube have emerged from community-centric origins, but captured greater mind share by applying user-generated content to interested groups with both direct and indirect relationships with the content authors.

**Services and applications that offer community are a natural evolution of the Anywhere Network. They enable much-needed service segmentation to better manage the seemingly infinite variety of potential services and applications.**

Services and applications that offer community are a natural evolution of the Anywhere Network. They enable much-needed service segmentation to better manage the seemingly infinite variety of potential services and applications. Furthermore, players will combine community-centric services and applications with powerful search and discovery capabilities, which will demand a degree of personalization and ultimately drive the Anywhere Network towards the delivery of user-centric solutions illustrated in Exhibit 2. In addition, the coordination of like-minded parties will create viral peer-to-group (P2G) and peer-to-peer interactions that capitalize on the integration of seamless communications, media distribution and ad-hoc transaction capabilities that will emerge from the commerce-centric capabilities.

## Search-Centric Solutions

Google and Yahoo! made search and ad-supported search-centric business models hugely successful. Google mastered a business model well suited to non-premium advertising; Yahoo! has focused more on premium advertising, such as complex brand-focused campaigns run by ad agencies. Non-premium advertising opportunistically drives users to particular company sites based on complex prioritization algorithms, and premium advertising is focused on the subtle activities associated with bolstering company brands.

Both Google and Yahoo! aggressively pursue expansion strategies to implement complementary solutions, such as instant messaging, e-mail, video and other types of media services, partnerships with telecom service providers, and a variety of infotainment solutions. Although diversification is critical for these players, they run the risk of diluting the value of their core solutions by spreading themselves too thin. Vertically integrated technologies and approaches will challenge them to move beyond highly complementary offerings, such as the storage and indexing of media and search capabilities.

Both players are known for their dictatorial approach to the market, which does not position them as particularly good ecosystem partners. Their current search capabilities need to evolve to offer greater granularity and search accuracy with the increased market demands for personalization, service discovery and ubiquitous capabilities. A slew of startups aspire to be the next Google with improved search capabilities. Chances are that Google will acquire one or more of them, particularly while it still enjoys a lofty enterprise valuation.

Craigslist and Wikipedia are among the other search-centric business models. Wikipedia is a nonprofit and relies on user-generated content for its electronic encyclopedia. Craigslist classified advertisement service operates with modest revenue essentially to cover its costs. The approach that craigslist and Wikipedia are adopting disrupts ad-supported search-centric models. It dilutes usage of sites such as Google and Yahoo! and offers search and discovery capabilities without being encumbered by advertising.

The Anywhere Network is enabling the commoditization of traditional search capabilities, requiring major players such as Ask, Google and Yahoo! continuously broaden their capabilities. Although these players have well-known brands, they run the risk of losing their market positions if they lag in innovation. The key drivers for the commoditization in traditional internet search include:

- Increased demands of Anywhere Consumers as their usage of the Anywhere Network becomes more specialized, personalized and sophisticated.
- The emergence of companies with limited revenue aspirations, such as craigslist interest groups, rely on user-generated content such as Wikipedia, and other companies that offer compelling substitute internet search capabilities.
- Increased variety of online advertising, and increased sophistication and expectations of advertising agencies.
- Increased integration of search capabilities in other Anywhere Network service offerings, including media and service-centric social networks that seemingly emerge overnight, such as MySpace and YouTube.

Traditional internet search providers must innovate to broaden the scope of their offerings. In the process of doing so, they will face challenges in migrating beyond complementary service offerings, without dramatically changing their vertically integrated approaches to technology innovation. Yahoo! has already confronted this challenge—one of its senior executives acknowledged that it has spread itself too thin in the marketplace in a memo leaked to the Wall Street Journal (the so-called “Peanut Butter Manifesto”).

**Non-premium advertising opportunistically drives users to particular company sites based on complex prioritization algorithms, and premium advertising is focused on the subtle activities associated with bolstering company brands.**

## Connectivity-Centric Solutions

Throughout the Anywhere Network, residences, enterprises and municipalities are deploying private networks to meet specific requirements (such as Wi-Fi in the home or in hot spots throughout a community). These wireless solutions typically rely on unlicensed radio spectrum, operate independently of other networks and use rudimentary management systems. These are in contrast to the highly coordinated networks offered by broadband, media and communication companies, which leverage dedicated resources such as licensed radio spectrum and operate over wide coverage areas. Lacking coordination between local networks and challenged by using shared resources such as unlicensed radio spectrum, the private residential, enterprise and municipal networks have traditionally been unable to scale beyond local and metro-wide network area solutions.

Companies such as Wibiki, FON and Ozone offer connectivity-centric solutions that capitalize on the widespread adoption of private residential Wi-Fi technology. These players give owners of residential Wi-Fi the opportunity to opt into community-wide networks of consenting residential access-point owners. These companies aggregate and manage the residential Wi-Fi access points into a patchwork of wireless coverage offered to those consenting parties. This nascent market's success will depend largely on the level of service ubiquity and network coverage it can achieve with the early adopting market and the extent to which it can incorporate networks with broader coverage into the initial patchwork. British Telecom signed an agreement with FON to create an integrated wireless network as an

extension of its FusionOne fixed-mobile network offering. In the interim, this approach requires hybrid solutions, perhaps based on least-cost routing algorithms in the devices, to enable adequate service coverage. Success of connectivity solutions will accelerate improvements in the performance of unlicensed systems, including low-cost transmission solutions and low-cost smart antennas and cognitive radios.

The creation of ad-hoc consumer networks holds promise in creating significant Anywhere Network communities that could support business models. If they succeed, these networks will dramatically change the delivery of media and communication services to the Anywhere Consumer. Even as the provisioning of fixed network capacity continues, wireless and mobile resources will be deployed in an ad-hoc manner and minimize the role of mobile service providers in network operations.

## Conclusions

The media and communications industries are in apparent chaos as they try to meet the ever-increasing demands of the Anywhere Consumer and Anywhere Enterprise. As solutions drive support for community-led and user-centric control, they disrupt existing and emerging business models and continuously create opportunities for new entrants. Although it's clear how existing business models must evolve to capture the emerging Anywhere Network opportunities, there are a variety of unanswered questions that will be investigated in future Yankee Group publications. In particular:

- What are the technological underpinnings that will enable the proliferation of the Anywhere Network?
- How will the Anywhere Consumer and Anywhere Enterprise respond to the opportunities afforded to them by the Anywhere Network and its associated service offerings?
- How must vendors and service providers prioritize and appropriately time their investments to maximize their revenue opportunities?
- What innovations and business models are likely to act as change agents and how can industry players position themselves to capitalize on these change agents?
- What appropriate transition strategies must vendors and service providers use to capitalize on the evolution of Anywhere?
- What are the primary anchors and major technical and commercial sensitivities associated with the various solutions enabled by Anywhere?

Yankee Group's Anywhere Network research agenda will tackle these topics with interviews, primary research and analysis during the next 24 months. Upcoming Yankee Group Reports include:

- *Next Trillion Dollars for the Anywhere Telco*
- *Anywhere Networking in Economically Emerging Markets*
- *Regulatory Rights and Risks on the Road to the Anywhere Network*
- *Navigating the Anywhere Network Technology*

**The media and communications industries are in apparent chaos as they try to meet the ever-increasing demands of the Anywhere Consumer and Anywhere Enterprise.**

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### Yankee Group | the global connectivity experts™

A global connectivity revolution is under way, transforming the way that businesses and consumers interact beyond anything we have experienced to date. The stakes are high, and there are new needs to be met while power shifts among traditional and new market entrants. Advice about technology change is everywhere—in the clamor of the media, the boardroom approaches of management consultants and the technology research community. Among these sources, Yankee Group stands out as the original and most respected source of deep insight and counsel for the builders, operators and users of connectivity solutions.

For 37 years, we have conducted primary research on the fundamental questions that chart the pace and nature of technology changes on networks, consumers and enterprises. Coupling professional expertise in communications development and deployment with hundreds of interviews and tens of thousands of data points each year, we provide qualitative and quantitative information to our clients in an insightful, timely, flexible and economic offering.

### Yankee Group Link

As technology connects more people, places and things, players must confront challenging questions to benefit from the changes: which technologies, what economic models, which partners and what offerings? Yankee Group Link™ is the research membership uniquely positioned to bring you the focus, the depth, the history and the flexibility you need to answer these questions.

Yankee Group Link membership connects you to our qualitative analysis of the technologies, services and industries we assess in our research agenda charting global connectivity change. It also connects you to unique quantitative data from the dozens of annual surveys we conduct with thousands of enterprises and consumers, along with market adoption data, comprehensive forecasts and global regulatory dashboards.

### Yankee Group Link Research

As a Link member, you have access to more than 500 research reports and notes that Yankee Group publishes each year. Link Research examines current business issues with a unique combination of knowledge and services. We explore topics in an easy-to-read, solutions-oriented format. With the combination of market-driven research and built-in direct access to Yankee Group analysts, you benefit from the interpretation and application of our research to your individual business requirements.

### Yankee Group Link Interaction

Our analysts are at your further disposal with data, information or advice on a particular topic at the core of a Link membership. We encourage you to have direct interaction with analysts through ongoing conversations, conference calls and briefings.

### Yankee Group Link Data

Yankee Group Link Data modules provide a comprehensive, quantitative perspective of global connectivity markets, technologies and the competitive landscape. Together with Link Research, data modules connect you to the information you need to make the most informed strategic and tactical business decisions.

### Yankee Group Consulting

Who better than Yankee Group to help you define key global connectivity strategies, scope major technology initiatives and determine your organization's readiness to undertake them, differentiate yourself competitively or guide initiatives around connectivity change? Our analysts apply Yankee Group research, methodologies, critical thinking and survey results to your specific needs to produce expert, timely, custom results.

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The people of Yankee Group are the global connectivity experts™—the leading source of insight and counsel for builders, operators and users of connectivity solutions. For more than 35 years, Yankee Group has conducted primary research that charts the pace of technology change and its effect on networks, consumers and enterprises. Headquartered in Boston, Yankee Group has a global presence including operations in North America, Europe, the Middle East, Africa, Latin America and Asia-Pacific.