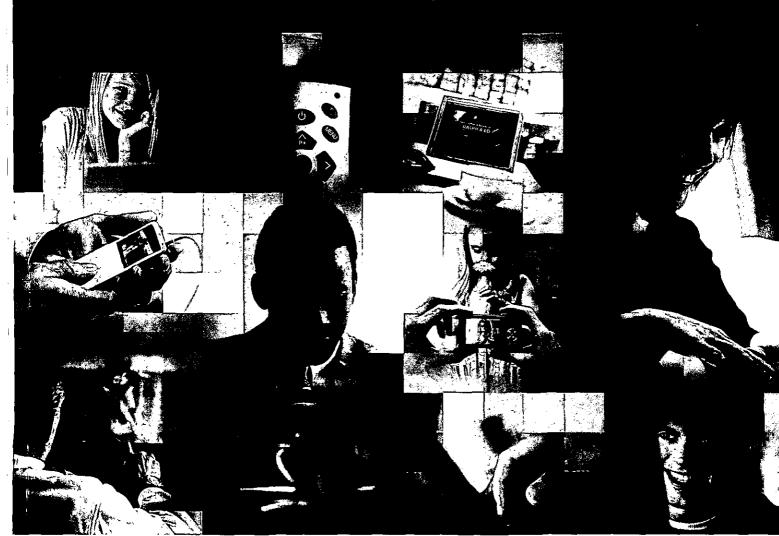


# Making Sense of the Content R evolution

LEVEL 3 COMMUNICATIONS 2006 ANNUAL REPORT SUPPLEMENT

Level 3





INTRODUCTION

Over the past century, the communications industry has continually evolved to extend the reach of our ears around the globe. From early rotary phones to newer wireless handsets smaller than a credit card, the industry has focused on improving the quality and availability of verbal communications.

Today, advancements in technology, decreasing prices for bandwidth, and the subsequent widespread availability of broadband access are enabling a new era of visual communications, effectively extending the reach of our eyes around the world.

The economics of information delivery have changed dramatically in recent years, giving rise to new and exciting applications, such as online video. Video-sharing Web sites are growing to be the most heavily trafficked on the Internet. From online music to social networking, online gaming, software downloads and user-generated video, we are entering an era of rich media content that is highly personalized, highly mobile and highly interactive.

Several forces are driving this radical transformation in the way we share information:

- Enhanced performance and economic efficiencies of Internet Protocol (IP) networks have led to widespread adoption of IP as the new standard for transferring information.
- Greater access and more attractive pricing have encouraged widespread use of broadband in business and at home.
- Lower costs for IP network bandwidth have encouraged greater innovation, paving the way for new and varied forms of digital content that move beyond static files to interactive, personalized communications.
- Increased popularity of mobile devices has contributed to audience fragmentation, speeding up the digitization of information and contributing to the explosive growth of rich media content.

All of these trends are having a profound effect on the communications industry. Networks originally designed for traditional communications are now being flooded with content – especially video.

To deliver rich media content, information is broken down into digital bits and moved over networks. This "digitization" is not new. But transporting video content requires moving enormous quantities of bits. And we are only in the early stages, sending relatively small, short-format files like user-generated videos. Over time, as the economics continue to improve, much larger files like full-length motion pictures will increasingly move over networks. The implications for the communications industry are profound. The fact is that most networks were not designed for these massive content files and the new demands of content and media companies.

But the Level 3 network was designed to accommodate this kind of unpredictable change, while also continuing to lower the cost of moving information. We believe the Level 3 network has the inherent ability to scale to meet demand with significant network reach, with advanced content distribution capabilities, and with the ability to continue to evolve as technology and market demands evolve.

We have prepared this special supplement to our 2006 Annual Report to Stockholders to help provide our perspective and insight on the changes that are reshaping the communications industry and the key role that Level 3 is playing in helping to usher in and enable the Content (R)evolution. We begin with a brief discussion of content itself – what it is, who uses content, and how all of this is changing the way we communicate.

Next, we ask why is this happening. We discuss what is behind the Content (R)evolution, how economic changes have paved the way for the rise of online content, and why it is occurring now.

In the third section, we review the effect of these new forms of communications on the communications industry and the companies that produce and distribute rich media content. The rigid schedules and formats that have typified entertainment viewing are starting to disappear. Increasingly, it is becoming possible to view, play or listen to what you want, when you want, where you want. From hosted Internet applications to broadcast networks, many businesses are beginning to seek new ways of distributing information. We discuss

how established content providers are exploring options for distributing their content over networks. We also look at how new demand from emerging content providers is affecting the underlying business of communications.

In the fourth section of this supplement, we discuss our company's role in all of this and our comprehensive approach to carrying all forms of digital content. We outline the advanced capabilities of the Level 3 network and examine how the Level 3 network, further strengthened by recent acquisitions, provides what we believe is a unique combination of critical

We believe that increased demand for better access to more information with higher resolution will continue to create demand for the advanced infrastructure and services offered by Level 3.

assets and capabilities for our customers. This section also illustrates in some detail the role Level 3 plays in delivering content, including broadcasts of major sporting events, and how the company's new content delivery services will enable more efficient and effective movement of online video.

In conclusion, we believe that increased demand for better access to more information with higher resolution will continue to create demand for the advanced infrastructure and services offered by Level 3. We hope that this special supplement serves as a useful guide to you, our Stockholders and fellow owners, on how these important changes present what, we believe, is a substantial and growing opportunity for our company. We encourage you to continue to ask questions, and most importantly, we appreciate your support.

Walter Scott, Jr.

Chairman of the Board

Walte Scal

James Q. Crowe

Chief Executive Officer

The Rise of Online Video and Other Rich Media Content

# What is the Content (R)evolution?

Unprecedented social and economic forces are changing everything about communications. People are communicating differently. They are increasingly sharing information online, and the nature of the information itself – the content – is changing.

This sweeping transformation is the result of changing technology, improving economics, the nature of content, and how we access content. What we are witnessing is nothing short of a communications revolution – the Content (R)evolution. It is, in effect, evolution on a revolutionary scale.

We will discuss the social phenomenon, the underlying causes, the implications for the industry, and how all of this affects you as a consumer of information and as an investor. We will also review why we believe Level 3 is well-positioned to capitalize on the changes that are occurring. But, we begin our report with a look at content itself.

#### What is Content?

On-demand services, such as online music sharing, social networking, online gaming, software downloads and video distribution are now widely available on the Web. Content can be defined as

the applications, graphics, audio and visual files that make up these services. A description of various types of content follows, beginning with smaller bandwidth applications, such as music, and leading to the largest application, video, which has enormous implications for bandwidth allocation and for the industry.

#### Music

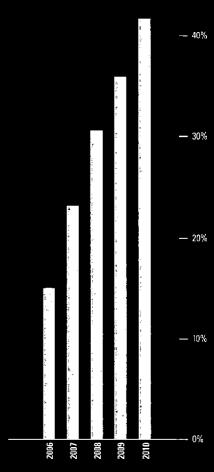
Everything about the way music is made, distributed and accessed has changed. Music has become digital and on demand. Consumers used to visit a music store to shop for music. Today, consumers are shifting in greater degrees to purchasing music online.

Digital music applications allow quick and easy purchasing of online music files, complete with album information and cover art. Additionally, online "radio stations" are making music available directly to consumers based on a range of personal preferences.



#### MUSIC MOVING ONLINE

Digital Music Spending as a Percent of Total Music Spending in the U.S., 2006-2010\*



\*Includes digital downloads, subscriptions and mobile music

Source: eMarketer, 2007



#### **Social Networking**

Social networks connect people online to others with similar interests or responsibilities. Social networking sites are radically changing the way people communicate with each other. Online communities are turning old hub-and-spoke forms of communication inside out, as increasing numbers of users identify and communicate with each other by exchanging information with an ever-expanding network of contacts.

Web portals, easy-to-use Internet publishing tools, advanced search engines and other social networking applications are enabling users to customize personal pages with blogs, as well as audio and video clips to communicate their interests and preferences to this broader audience of people with common interests.

Increasingly, user-generated content is being uploaded or posted for distribution via social networking sites. This two-way flow of information enhances the role of online social networking as a dynamic community for the exchange of information.



"Fully half of all teens and 57 percent of teens who use the Internet could be considered Content Creators. They have created a blog or Web page, posted original artwork, photography, stories or videos online or remixed online content into their own new creations.

"Roughly the same portion, 53 percent of online teens report music downloading. Nearly one-third or 31 percent of online teens say they download video files to their computer. The majority of teens who download video, 61 percent also say that they share files (such as music, video, picture files or computer games) from their computer with others online."

#### Source:

Lenhart, Amanda; Madden, Mary. "Teens as Content Creators," Teen Content Creators and Consumers, Pew Internet & American Life Project, November 2, 2005, www.pewinternet.org/pdfs/PIP\_Teens\_Content\_Creation.pdf, accessed on January 11, 2007, page 1.

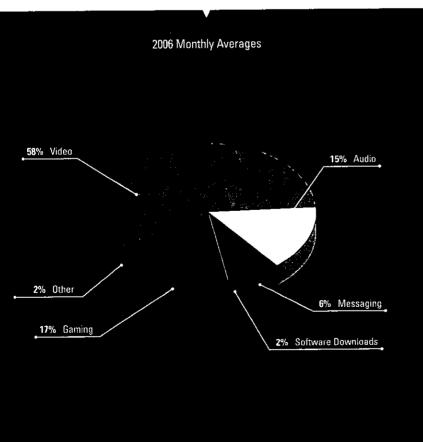
Lenhart, Amanda; Madden, Mary. "Teens as Content Consumers," Teen Content Creators and Consumers, Pew Internet & American Life Project, November 2, 2005, www.pewinternet.org/pdfs/PIP\_Teens\_Content\_Creation.pdf, accessed on January 11, 2007, pages 10 and 15.

#### Gaming

Online gaming is realizing explosive growth as users shift from console-based gaming to network-based gaming. Long gone are the days of using an Atari® console with a simple joystick and pile of 8-track sized cartridges. Large networks of players now engage in online gaming with some users spending up to 50 hours per week in virtual games that feature real-time interaction with other users across the globe. World of Warcraft,® a popular multiplayer online game, counts over 8 million subscribers worldwide.

With the migration of so many disparate individuals into virtual gaming communities, largely

#### **ONLINE TRAFFIC BY CONTENT APPLICATION**



Source: Level 3 Estimates



concentrated in the key target demographic of males age 18 to 24, the distribution of games is shifting from a retail business to a network-based business.

As the popularity and adoption of online gaming increases, the performance of gaming systems, software and distribution is expected to drive innovation and growth in the industry. To service this growth, online gaming will place greater and greater demands on network bandwidth.

#### Software

The increased capacity of the Internet to enable the exchange of information and applications has initiated a shift toward online distribution of software. Software has typically been available prepackaged for retail sale. Each new upgrade necessitated that users return to the nearest software retailer to purchase another box of disks.

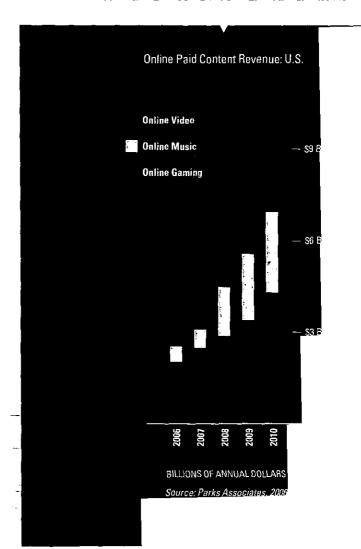
As the Internet has emerged as a more efficient means of moving large amounts of information, software downloads have gained popularity as a preferred form of accessing and upgrading programs. Cumbersome boxes of outdated software and manuals are beginning to be a thing of the past with streamlined, online access to new releases, upgrades and patches – all available at the click of a mouse.

With the online migration of software downloads, consumers are also beginning to gain online access to software services. Web-based software offers consumers the flexibility to access and select specific features with the potential to opt for advanced features as needed. This

flexibility enables greater customization of software applications. Users who may consider the prepackaged version to be too expensive, may now begin using programs online, accessing the features that best suit their needs and budget. Web-based software services also provide more seamless integration of upgrades and compatibility with a growing array of new devices.

With these benefits, online adoption of software is expected to grow and generate increasing demands on network bandwidth, as increased user traffic begins to involve larger and larger files via the Internet.

#### **ONLINE REVENUE BY CONTENT APPLICATION**



# What is Driving the Content R evolution?

Why is it occurring now? In the simplest terms, it all comes down to economics. The continuously improving economics of broadband communications are making it possible to move massive amounts of information more efficiently over communications networks.

Historically, using communications networks to distribute large quantities of information was not economically feasible. But with the industry shift to IP technology and the widespread adoption of broadband, the cost of moving information is continuing to decline, making bandwidth-intensive applications such as online video distribution possible.

The efficiencies created by improvements in network technologies have resulted in a cycle of industry developments that are fueling increases in the development and exchange of online content. Rapid digitization of new and existing content is enabling a wealth of information to become available over the Internet. Increases in available

information and user traffic are also creating rapidly growing demand for video and other bandwidth intensive applications. This growth in demand is, in turn, leading to new innovations in the distribution of information to a growing range of audience groups.

Bandwidth is the currency of this new Internet age. To transfer information online, all content must first be broken down into digital bits. As more information is available in digital form, a greater and greater number of bits travel across networks, increasing demand for network bandwidth. And when the information users want is video, the bandwidth required is orders of magnitude greater than previously required to distribute static content

- 1,500

1,250

- 1,000

- 750

500

#### BANDWIDTH – A CRITICAL RESOURCE

The distribution of high-definition (HD) movies over the Internet has enormous implications for the industry. The bandwidth demands of these files are immense relative to e-mails, documents, songs and even standard-definition movie files.

As viewer demand for Internet distribution of HD-quality movies grows, network bandwidth remains a critical resource in effective delivery to the end user.

**—** 250

E-MAIL DOCUMENT SONG

AVERAGE FILE SIZE IN MEGABYTES

Source: Level 3 Estimates

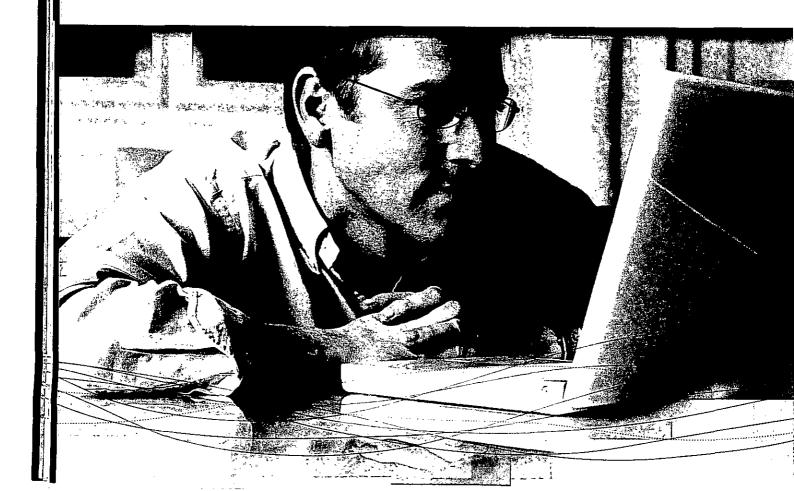
#### Video

While music, social networking, gaming and software are rapidly increasing demand for bandwidth, the single largest driver of bandwidth demand today is online video distribution.

With the rising popularity of user-generated content and video-sharing Web sites, an increasing number of consumers are beginning to create, access and share video content over the Internet. Today, it's relatively simple for a mobile phone user to capture a special moment on video to upload and share with friends and family within minutes.

As consumer demand for online video continues to grow, change is also occurring in the distribution of mainstream media and entertainment. As a result, broadcast networks are beginning to seek greater efficiencies in the delivery of existing content with rapid digitization of television and movie archives.

In addition, broadcast networks are also offering new programming formats – from online downloads to podcasts – to address consumers' shifting preferences. Each of these trends is accelerating growth in bandwidth demand, particularly as opportunities for the distribution of video over the Internet continue to increase.



"Video-sharing sites have rapidly become among the most heavily trafficked on the Internet. Today, video is the single largest driver of bandwidth demand with some experts estimating that video comprises more than 60 percent of Internet traffic. And we are only at the early stages.

"Most of the video traffic today is short-format, user-generated content. As we begin to see full-length commercial movies and television programming move over the Internet, the industry faces unprecedented delivery challenges. But at the same time, it creates a real opportunity for companies with the right kind of network."

- James Q. Crowe, CEO, Level 3 Communications, Inc.

#### INTERNET VIDEO AUDIENCE

157 million	U.S. online video viewers in 2010, up from 107.7 million in 2006.
80.1 percent	U.S. Internet users who are online video viewers in 2010, up from 59.8 percent in 2006.
53.0 percent	Portion of U.S. population that will view online video in 2010, up from 37.6 percent in 2006.

Source: eMarketer, 2001



New Distribution Models Creating New Opportunities

# How is the Content (R)evolution Reshaping the Communications Industry?

With increased network capacity and superior economics, online distribution of large bandwidth files has emerged as a superior means of moving information across the street or around the globe – and that is fundamentally changing the communications industry.

This shift and corresponding changes in consumer behavior are challenging traditional supply chains and advancing new methods of content distribution. As more consumers turn to the Internet to access a wide range of information, traditional and emerging content distribution companies like music and video distribution companies, broadcasters, content providers and others are now seeking new and more cost-effective ways of delivering content over networks to a broader audience base.

A description of how online content distribution is enabling greater economic efficiencies and how these changes are affecting both traditional and emerging content providers are discussed on the following pages.

# Online Delivery Changing Information Distribution Models

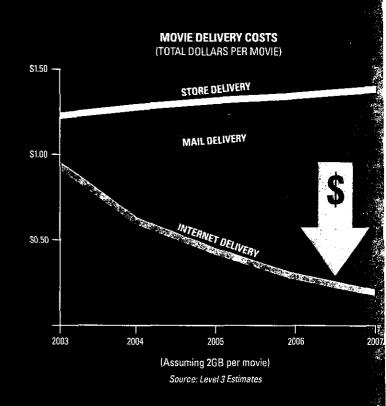
The costs associated with traditional, physical delivery of content will tend to remain flat because there are limited opportunities to streamline costs and drive new efficiencies. At the same time, ongoing technology innovation and growing demand will continue to drive down the costs of delivering information via the Internet.

The growth of online distribution of content, such as video, music and software, is largely dependent on the development of technology that reduces the cost of moving information over the Internet to a point that is competitive, and ultimately less expensive, than existing distribution channels.

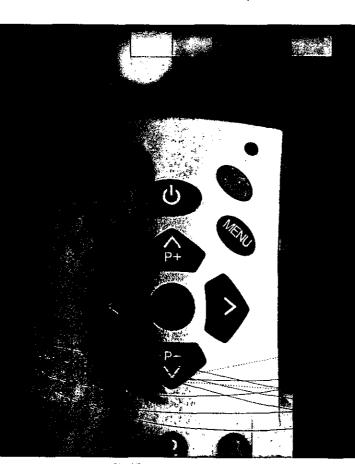
#### MOVIE DELIVERY COSTS LESS OVER THE INTERNET

Today, it costs less to deliver a movie over the Internet than to rent one by mail or from a store. And the costs of Internet delivery continue to go down while the cost of other delivery methods remain relatively flat. It is only a matter of time before improved download speeds combined with continuing lower costs of network transmission enable the widespread adoption of online movie delivery.

Video already represents more than half of the traffic on the Internet, but it is largely short-format, user-generated video. Continued improvements in delivery costs and download speeds will have important implications for the communications industry. With more than 3 billion movie rentals per year, there is a real opportunity for network communications companies, with the right scale and economics, to meet that new demand.



#### **VIEWING CONTENT ANYTIME, ANYWHERE**



Time-Shifting: Historically, broadcast companies have designed programming schedules that have essentially determined what viewers watch and when. Recently, on-demand services and devices such as TiVo® and Digital Video Recorders (DVRs) enable consumers to select the programming that they would like to enjoy and watch it at their convenience, rather than needing to catch it when it's scheduled.



Traditional Delivery Channel: Delivery of content from a single source at a specific point in time. This is the notion of "appoint television." Scheduling is driven by the content source.

#### Moving Television Programming: Broadcast Networks

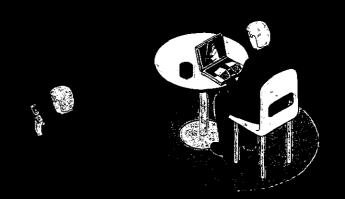
The increase in popularity of HD programming creates some new challenges for existing broadcast networks. As demand increases, the scalability, economic efficiencies and dependability of terrestrial communications networks present an attractive alternative to existing satellite transmission.

As program producers and other content creators seek to optimize their networks for high quality and flexible programming, terrestrial networks also present opportunities for companies to distribute their content through new media channels, such as the Internet or mobile applications. Traditionally, content distribution companies, such as television networks, have operated in a broadcast or one-to-many mode of distribution; that is, a single program is distributed to many consumers at a specific time.

Take, for example, a primetime sitcom. The traditional model of distribution has been to deliver that content – a television show – from one place (the broadcast station) to many (residential viewers) at the same time (primetime) on the same device (home television).

Today, increased audience fragmentation has created the need to follow viewers to many more places than simply the living room television. Increasingly, users are beginning to demand access to programming via the Internet and mobile devices like cell phones and Personal Digital Assistants (PDAs). It is in the early stages now, but demand for mobility will only increase over time. Networks designed to deliver high-quality content to broadcast destinations will also provide alternatives for content owners to reach more mobile audiences that do not want to be confined to traditional broadcast scheduling.

Place-Shifting: Place-shifting devices allow consumers to watch programming on any number of Internet-compatible devices. As communications continue to converge, new devices will emerge that combine most – if not all – of communications on one device. Today, PDAs enable a range of applications from voice communications, e-mail, fax, Internet browsing, paging, scheduling and more. With the emergence of these technologies, the communications and entertainment industries are beginning to seek new ways to satisfy the demands of rapidly evolving and increasingly mobile audiences.



#### Moving Live Events: Live Television Programming

Producers of live programming, such as sports and news events, are also exploring new ways to meet the changing demands of their audiences. The movement of audiences away from traditional broadcast media and the corresponding shift in advertising are starting to create new ways to capitalize on the investment in covering live events.

Today, digitization and network distribution of live feeds enable dependable and efficient delivery of live programs from event sites to broadcast networks. (Refer to diagram on pages 28 - 29.) Increasingly, network solutions are beginning to enable producers and rights holders who own content, such as professional sports leagues, to distribute the same live content to many different locations and devices via the Internet and mobile devices.

#### **Moving Ads: Advertising Agencies**

Increasing demand for content delivery to a broader range of consumers has had a significant effect on the advertising industry. Ad agencies now need to create and place advertisements for distribution to numerous devices with diverse formatting and resolution standards – from flat-screen televisions formatted for HD to Web sites with dynamic banner ad options, as well as mobile devices with small screens and low resolution quality.

#### **Moving Information: Information Aggregators**

With the initial rise of the Internet, the availability and transfer of information has experienced rapid growth. This information explosion has given rise to a new generation of content providers, changing the way we research, review and exchange information.

Now household names, content providers such as AOL, eBay, MSN, Yahoo! and Google have all

#### CASE STUDY: MLB\* PIONEERS ONLINE GAME COVERAGE

Traditionally, baseball fans were limited to watching select broadcasts of live games on television. Important innovations by Major League Baseball (MLB) have now made it possible for fans to access games online or via mobile devices. The increasing availability of sports coverage online demonstrates how content owners and rights holders are capitalizing on Internet delivery to develop new business models and distribute content directly to the end user.

- Beginning in 2000, MLB pioneered this shift in the United States, with online subscriptions to audio coverage of live games on MLB.com.
- In 2002, MLB.com began to introduce online subscriptions to video coverage of live games.
- By 2004, MLB.com offered online subscriptions to video coverage of more than 2,300 live games and customized on-demand highlight packages.
- In 2005, MLB.com recognized the need to reach increasingly mobile audiences by providing subscription service for live audio or video highlight packages on mobile devices.
- With over 1 million paying subscribers, MLB.com averages
   6 million unique online visitors per day.



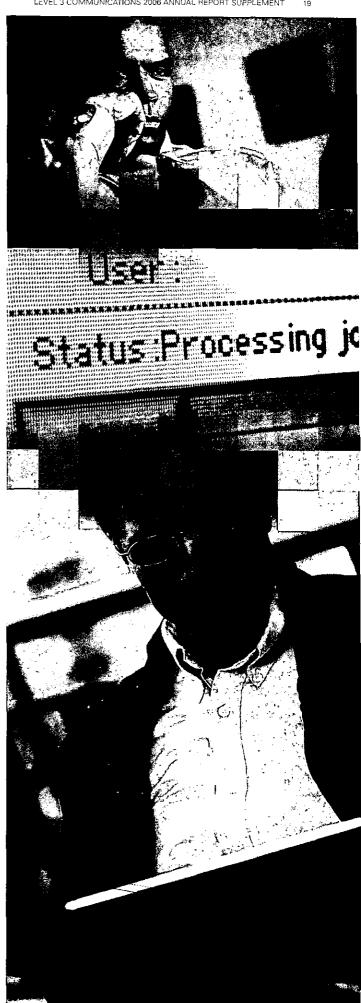
grown from being the vanguards of a new era ushering in widespread availability of e-mail, search engines and online auctions - to becoming the cornerstones of digital communications and commerce.

Today, these providers are facing the need to sustain existing services while also continuing to innovate and adapt new technologies to meet shifting consumer interests and demands. As more and more customers begin engaging in visual communications, demanding delivery to a greater and greater number of devices and locations, the flexibility and reliability of network resources becomes increasingly important.

#### **Moving the Future: Emerging Content Providers**

Network delivery of information is enabling rapid growth of online content applications, such as music, photo and video-sharing Web sites, and has encouraged consumers to spend more and more time on the Internet. As quickly as developers create new applications, interfaces and tools, growing online communities begin to adopt these new services to connect users with shared interests and personal preferences.

Whether delivering video on-demand, video conference or telepresence capabilities, software downloads, online gaming or social networking, the increased popularity of these applications often threatens the technical stability and network availability of emerging content providers. Network stability and scalability are key challenges for emerging providers who are simply not able to predict explosive growth, traffic spikes or other network events.





# How is Level 3 Enabling the Content R evolution?

The communications industry has struggled to cope with growing demand from new media and content companies. Networks originally designed for traditional communications are now being flooded with new kinds of content.

But most networks were not designed for this changing environment, for an explosion of content, or for the real-time flexibility that new content and media companies require.

The core Level 3 network was designed and built from its inception to accommodate unpredictable change and new advancements in technology. The network features significant reach and scale as well as redundancy, proven reliability and advanced capabilities that enhance network performance

and the ability to continue to evolve as technology and market demands evolve. And the company believes that is why so many of the new, emerging content companies are choosing Level 3 as their network partner.

As demand for online content and video continues to grow across a broad range of media, Level 3 believes it remains exceptionally well-positioned to continue to drive increased economies of scale and accommodate increases in bandwidth requirements

# Level 3 Network - North America

#### **Level 3 Network Architecture**

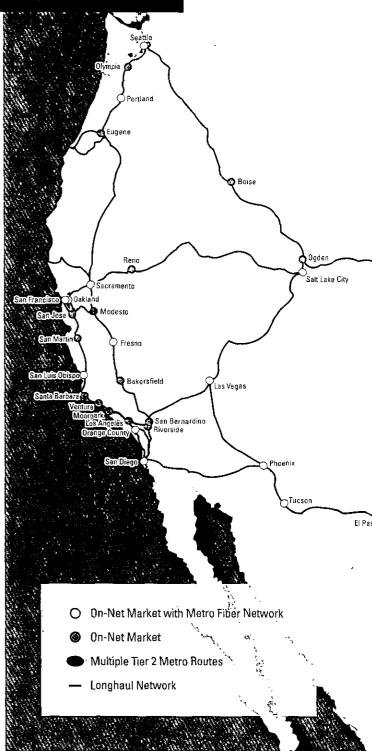
With one of the newest and most advanced networks in the world, Level 3 offers approximately 47,000 core intercity route miles in the U.S. and Europe, plus fully redundant undersea cable capacity crossing the Atlantic Ocean. Flexible architecture and design make the Level 3 network highly scalable to meet the changing needs of traditional and emerging content providers.

The Level 3 network employs leading edge technology. Advanced technology generates greater transmission speed, network performance and economics.

As the Level 3 network continues to expand in metropolitan areas, more direct routes are established for customers, improving network reach and connecting businesses directly with the Level 3 network.

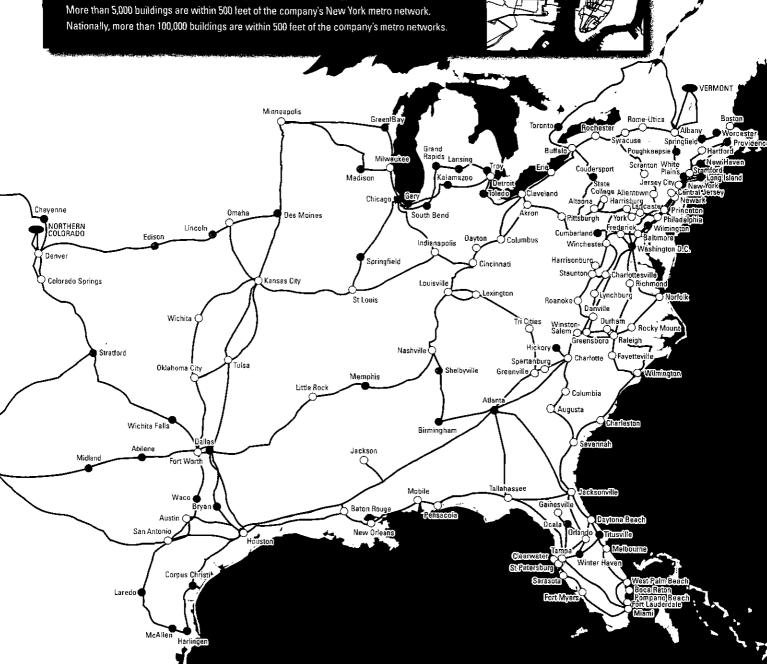
Expansion in metropolitan areas also decreases the cost of moving traffic over the network. Fewer handoffs to third-party providers between the point of origination and destination translate into greater cost control and better margins.

The Level 3 network is engineered for route diversity, redundancy and resiliency, which mean better availability and performance that enhance the end-user experience.



#### **NEW YORK METRO NETWORK**

The New York metropolitan area network is one of more than 100 metro networks owned and operated by Level 3 in cities across the United States. With its extensive metro footprint, the company connects directly to office buildings and traffic aggregation points, enabling lower costs, consistent quality control, and easier deployment of new technology and services for customers. More than 5,000 buildings are within 500 feet of the company's New York metro network. Nationally, more than 100,000 buildings are within 500 feet of the company's metro networks.



# Level 3 Network - Europe Berlin Düsseldorf Warsaw **A** Leipzig Cologne Frankfurt Prague Zurich Vienna **LONDON METRO NETWORK** The Landon metropolitan area network is one of nine metro networks owned and operated by Level 3 across Europe. These networks enable customers to connect directly to the Level 3 intercity network and operate at significant scale across 32 cities in Europe. On-Net Market with Metro Fiber Network On-Net Market - Longhaul Network European network includes wavelength capacity



#### **Level 3 Network Services**

In addition to expansive network coverage and reliable performance, Level 3 also offers a comprehensive suite of services tailored to the needs of content customers. As network-based distribution of video, rich media and other large files continues to grow, video distribution services and content delivery networks will become increasingly important in moving information across the Internet.

Level 3 offers standard-definition and HD video distribution capabilities. These features help customers to grow with first-to-market innovation, including the first HD fiber transmission of a live sporting event and the first digital delivery of a major motion picture.

Level 3's Content Delivery Network (CDN) services enable it to address the increasing opportunity presented by rich media content, such as online music and video distribution, social networking, software downloads and online gaming. Video-centric

#### **CASE STUDY: SOCIAL NETWORKING**

#### The Challenge

A leading social networking provider with more than 16 million registered users planned to offer video content as a central feature on their Web site. Due to overwhelming demand, overall Web site performance was compromised by the added features, forcing the customer to remove the video content until network capacity could be expanded to handle the rapid increases in demand.

#### The Solution

Level 3 delivered a solution that addressed the capacity demands of the video features and eliminated significant front-end costs for rapid implementation — initial delivery was completed in less than five days, while scheduling full deployment over a three-month period.

#### The Benefits

The social networking provider achieved their goal of placing new video content in the main section of their Web site, maintaining the customer's market leadership position.

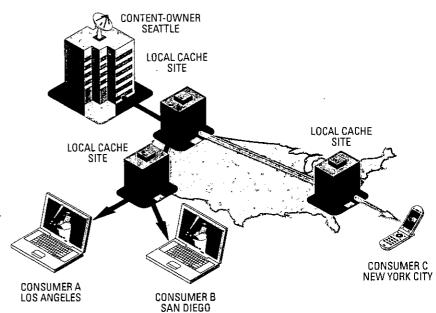
#### IMPROVING ACCESS TO CONTENT

# MOVING LARGE-BANDWIDTH FILES CLOSER TO THE CONSUMER

New advancements in network edge technology enable video and other large-bandwidth content to be delivered more effectively by storing the information in local cache sites at the edge of the network.

Information stored in these sites places the content closer to the end user and alleviates the need for information to travel via the core of the network to satisfy each unique, end-user request. Minimizing network traffic at the core delivers greater network efficiencies and generates higher quality delivery for frequently accessed content.

This example illustrates how information distributed by a content-owner in Seattle reaches consumers in disparate locations more efficiently via local cache sites – from Los Angeles and San Diego to New York City.



companies benefit from the delivery of video in a more intelligent and comprehensive way to a broader range of destinations. CDN services provide a comprehensive set of tools to simplify and streamline content distribution flow, pushing large volumes of content to the edge of the network, closer to the end user.

By shifting specific high-bandwidth traffic to the edge, traffic congestion is alleviated at the core of the network, ensuring greater network stability.

The addition of CDN services to Level 3's already robust portfolio of service offerings creates one of the industry's only single-source media distribution systems. Offering end-to-end solutions provides Level 3 customers with a more simplified way of storing, managing and delivering high-bandwidth content.

#### Level 3 Offers Unique Solutions For a Changing Industry

For both traditional and emerging content companies, the supply chain for the distribution of information is being dismantled with the rise of visual communications. Information demands and the needs of increasingly mobile audiences require a network provider that acts as a trusted partner with the expertise and technical resources to deliver business solutions in the most effective manner possible.

Level 3 remains uniquely positioned to serve each of these market segments and enable the online expansion of rich media content. With a full portfolio of end-to-end file and streaming distribution capabilities, a solid commitment to technological advances, a strong history of customer service, and a growing presence in metro markets, Level 3 offers the building blocks to meet a range of customer needs in the new era of visual communications.



#### The Right Economics

From its inception, Level 3's objective has been to drive down the cost of moving information and to leverage technology to maintain a competitive edge. Level 3 continues to engineer its network to adapt to evolving customer needs and accommodate uncertain change.

The network is designed to adopt new technology as it becomes available – at a lower cost than competitors. This focus on adaptability and a continuous commitment to investing in the network – one of the most advanced in the world – enables Level 3 to take advantage of the significant opportunity presented by increasing demand for bandwidth and declining costs as technology improves over time.

#### **CASE STUDY: ONLINE GAMING**

#### The Challenge

A leading online gaming provider faced challenges in scaling network capacity both rapidly and cost effectively. The customer needed to consolidate two separate data centers into one, while also securing adequate space to accommodate future expansion.

#### The Solution

Level 3 created a solution that provided scalable colocation space with integrated high-speed IP services to enable secure and reliable performance to optimize the end-user experience.

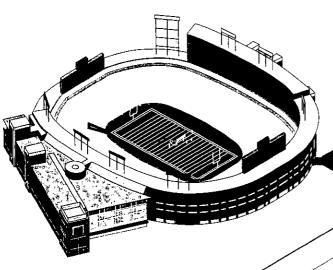
#### The Benefits

The online gaming provider was able to easily and rapidly expand its server infrastructure to meet growing demand by working with a single provider, Level 3, for both colocation and transit services. The continuity of service enables the customer to focus on core business objectives by eliminating ongoing network concerns as demand continues to grow.

# How Level 3 Delivers NFL® Games

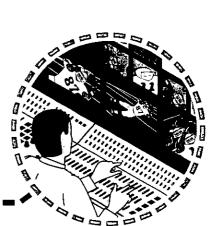
Level 3 is an industry leader in the delivery of professional sports, news, entertainment and special events for television networks. Level 3 provides network connectivity to the majority of professional sports venues in the United States and offers video

content backhaul and other services to enable the broadcast of professional sporting events. The diagram below illustrates how Level 3 helps to deliver the broadcast of National Football League games and other major sporting and entertainment events.



## LEVEL 3 VENUE EQUIPMENT

Provides Smart Interface between the TV Broadcast Production truck and the network. Helps Level 3 monitor connectivity and broadcast signal integrity.

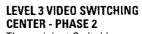


## LEVEL 3 VIDEO SWITCHING CENTER - PHASE 1

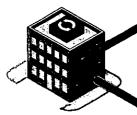
The initial Switching Center closest to the live event, receives the video stream and prepares the content for transport over the Level 3 network.

## TV BROADCAST PRODUCTION TRUCK

Aggregates the various video, audio and data input from the stadium into a "package" that will be sent to the Switching Center.

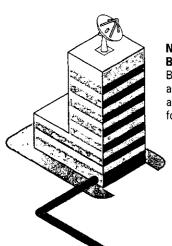


The recipient Switching Center aggregates content from the Level 3 network and delivers the content to the approved broadcast network.



### SUPPORT FOR VARIOUS VIDEO FORMATS

Information packets support a range of content formats for delivery to various content owners and end-user devices.



## NATIONAL TELEVISION BROADCASTER

Broadcast networks acquire the rights to televise an event or series of games for a season.

## LOCAL TELEVISION AFFILIATE

Local television affiliates acquire the national broadcast signal for local distribution.

# 

#### CONSUMER

In this example, a consumer has to be at home to watch the broadcast at a scheduled time. Now, consumers have a multitude of choices as to when and where they watch broadcast programming with new technologies described below.

#### SLINGBOXTM

A device that allows people to view their cable, satellite or personal video recorder programs remotely (place-shifting) from an Internet-enabled computer with a broadband Internet connection.

#### **XBOX**<sup>TM</sup>

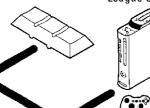
Various gaming companies offer subscription-based access to content they have rights to show from the League Office.

#### **CELL PHONE**

Mobile phone operators and device companies are continuing to develop cell phones to accommodate the delivery of live video and other bandwidth intensive content.

#### **ADVERTISING**

Level 3 delivers more than 5 million ads and promotional media content and 250,000 fiber and satellite video feeds around the world each year.



#### DVR

DVRs store broadcast programs to be watched at a more convenient time (time-shifting).

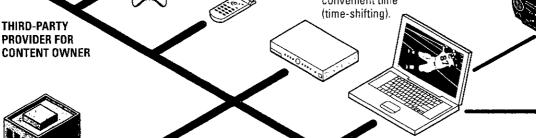
Users view available

with online access.

content on a computer



Gaming users enjoy gaming programs with mobile Internet access.



#### **LEAGUE OFFICES**

The League is the owner of original content and holds the distribution rights.

#### COMPUTER/LAPTOP HANDHELD DEVICE

Users view available content on any compatible device with online access.

#### Level 3 Completes Series of Strategically Important Acquisitions

Through a series of acquisitions, Level 3 has increased the reach, breadth and capabilities of its network. Each of the company's acquisitions can be described in one or more of three categories: backbone, metropolitan and strategic.

Backbone acquisitions generally enable Level 3 to expand the intercity network with the addition of new network route miles that create more direct routing options and greater redundancy for both new and existing customers. In addition, backbone acquisitions often yield new capital and operating efficiencies through consolidation and the elimination of duplicative routes and related costs,



**LEVEL 3 ACQUISITIONS** 

Through a series of recent acquisitions, Level 3 has increased the reach, breadth and capabilities of its network.

#### 2005

WilTel Communications Group, LLC (12/23/05):

**Acquisition Type:** Backbone and Strategic

**Services:** Voice, data, video and IP services, as well as the Vyvx\* video transmission business.

Network Benefit: Expands Level 3 Network with approximately 50 new North American markets and over 3,000 new route miles.

#### 2006

Progress Telecom, LLC (3/20/06):

Acquisition Type: Backbone

Network Benefit: Expands Level 3 network footprint across the southeastern United States, including 31 mobile switching centers. ICG Communications, Inc. (5/31/06):

**Acquisition Type:** Backbone and Metropolitan

Services: Transport, IP and voice services to wireline and wireless carriers, Internet service providers and enterprise customers.

Network Benefit: Expands Level 3 metro and regional fiber network in Colorado and Ohio. as well as the migration of customer traffic onto a single network to yield new capital and operating efficiencies.

Metropolitan acquisitions enhance network reach with fiber routes built directly into new or existing markets and customer buildings. The addition of new metro markets offers customers a greater range of options to meet their network needs – from the time information leaves their building until it reaches the end user. The ability to maintain traffic directly on the Level 3 network between the point of origination and destination also minimizes handoffs to third-party providers, enabling better cost control, improving gross margins, and increasing revenue growth and cash flow.

Strategic acquisitions enhance or accelerate entry into new markets, creating opportunities with new customers and adding new service offerings for existing Level 3 customers. An analysis of whether to build or buy assets or services typically precedes a strategic acquisition. Strategic acquisitions may also help Level 3 better respond to market trends and shifting customer demands.

With the acquisition of WilTel Communications Group, LLC in late 2005, Level 3 gained additional backbone route miles that enhanced the scalability and reach of its core network architecture. Through the integration of WilTel, Level 3 also acquired voice and video services. The acquisition of these capabilities added strategic value in positioning Level 3 as the industry leader in gathering and delivering broadcast quality content for the media and entertainment industry.

Level 3 later acquired Progress Telecom, LLC, ICG Communications, Inc., TelCove, Inc., Looking Glass Networks, Inc. and Broadwing Corporation. Combined, these backbone and metropolitan acquisitions capitalized on the strength of the existing network architecture to expand the reach of the Level 3 network, including intercity expansion and the addition of extensive new metro market routes. Additionally, these acquisitions initiated Level 3's entry into the enterprise business market.

In 2007, Level 3 also completed the strategic acquisition of the Content Delivery Network (CDN) business of SAVVIS, Inc.

TelCove, Inc. (7/24/06):

Acquisition Type: Metropolitan

Services: Metropolitan and regional communications services, including transport, Internet access and voice services.

Network Benefit: Expands Level 3 metro market network in the eastern United States, with approximately 4,000 on-net buildings. Looking Glass Networks, Inc. (8/3/06):

Acquisition Type: Metropolitan

Services: Data transport services including SONET/SDH, Wavelength and Ethernet as well as dark fiber and carrierneutral colocation.

Network Benefit: Expands Level 3 network with approximately 2,000 route miles in 14 major metropolitan markets. 2007

Broadwing Corporation (1/3/07):

Acquisition Type: Backbone and Metropolitan

**Services:** Data, voice and media solutions to enterprise and service providers.

**Network Benefit:** Expands Level 3 intercity fiber network.

Content Delivery Network business of SAVVIS, Inc. (1/23/07):

Acquisition Type: Strategic

Services: Content Delivery Network services improve performance, reliability, scalability and reach of customers' online content.

**Network Benefit:** Global distributed infrastructure in more than 20 countries.

# A Look Ahead

We believe lower bandwidth costs are paving the way for the rapid digitization and distribution of content over networks, resulting in entirely new methods of sharing information. While the Content (R)evolution is unequivocally upon us, it is only beginning.

With this supplement to our 2006 Annual Report to Stockholders, we hope that we have provided you with additional insight into the economic trends shaping the communications industry.

As demand for online content increases, so will consumers' appetite for quality. Today, convenience tends to outweigh consumer demand for sound and picture quality. However, as the novelty of online content wears off and convenience becomes expected, consumer demand for higher quality visual communications will exceed the pixilated, partial-screen images that are widely available today. Increasing demand for HD programming and video content is a prime example of this shift toward higher quality content experiences.

Ongoing improvements in mobile devices and greater access to wireless connectivity will continue to drive changes in the way information is transmitted. In fact, the term "remote access" may become obsolete with anytime, anywhere or "on-demand" capabilities emerging as the new standard.

Consumer demand for wireless data and content is growing rapidly, creating new challenges for wireless providers to provide faster, more robust connections. As wireless companies move to meet these infrastructure challenges, Level 3 will be there as a trusted partner to enable and enhance information flow for both wireless and terrestrial communications networks.

Both increased demand for quality and increased demand for mobility will substantially increase the need for bandwidth and capacity. Level 3 remains focused on meeting the needs of the new content and media companies with a network that can scale rapidly to accommodate ramping demands for bandwidth, while at the same time continuing to drive down the cost of moving information.

We look forward to continuing to meet the changing demands of our customers, as we continue to enable the Content (R)evolution.

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#### Forward-Looking Statement

Some of the statements made by Level 3 in this supplement are forward-looking in nature. Actual results may differ materially from those projected in forward-looking statements. Level 3 believes that its primary risk factors include, but are not limited to: integrate strategic acquisitions; increase the volume of traffic on our network; defend our intellectual property and proprietary rights; develop new products and services that meet customer demands and generate acceptable margins; successfully complete commercial testing of new technology and information systems to support new products and services; stabilize or reduce the rate of price compression on certain of our communications services; attract and retain qualified management and other personnel; and meet all of the terms and conditions of our debt obligations. Additional information concerning these and other important factors can be found within Level 3's filings with the Securities and Exchange Commission. Statements in this supplement should be evaluated in light of these important factors.



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