

Channel surfing: Demand for high-speed internet will offset decline in cable subscriptions

IBISWorld Industry Report 51711a Cable Providers in the US

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Nick Petrillo

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About this Industry

Industry Definition

This industry consists of companies that operate wired, third-party distribution systems for broadcast programming. These operators deliver TV programming received from cable networks or local TV stations to consumers via cable

infrastructure on a subscription basis. Cable providers also offer internet access and internet-protocol telephony services, usually as a package bundled with a cable TV subscription. This industry excludes telecommunications carriers.

Main Activities

The primary activities of this industry are

Providing third-party distribution systems for public broadcast programming
 Distributing video services by coaxial cable
 Providing internet access via cable infrastructure
 Providing internet-protocol telephony services via cable infrastructure
 Renting out cable boxes and digital voice recorders (DVRs)

The major products and services in this industry are

Advertising

Business services

Residential high-speed internet

Residential video

Residential voice

Other

Similar Industries

51521 Cable Networks in the US

Cable networks operate studios and facilities and distribute TV programs on a subscription or fee basis through cable systems.

51711c Wired Telecommunications Carriers in the US

Wired telecommunications carriers provide direct telephony services, internet access services and, in some areas, internet protocol TV services using wired telecommunications networks.

51711d Internet Service Providers in the US

Internet service providers (ISP) use wired infrastructure to provide clients with internet access and related services such as web hosting and web page designing.

51711b Satellite TV Providers in the US

Satellite TV providers are external competitors to cable TV providers. Satellite providers generally offer similar TV programming using a different method of broadcasting.

About this Industry

Additional Resources

For additional information on this industry

www.americancable.org

American Cable Association

www.fiercecable.com

Fierce Cable

www.ncta.com

National Cable & Telecommunications Association

IBISWorld writes over 700 US industry reports, which are updated up to four times a year. To see all reports, go to www.ibisworld.com

Industry at a Glance

Cable Providers in 2015

Key Statistics Snapshot

Revenue	Annual Growth 10-15	Annual Growth 15-20
\$115.9bn	4.2%	2.8%
Profit	Wages	Businesses
\$16.3bn	\$19.2bn	845

Market Share

- Comcast Corporation
40.3%

 - Time Warner Cable Inc.
20.6%

 - Cox Enterprises Inc. 9.6%

 - Charter Communications Inc. 8.4%

 - Cablevision Systems Corporation 5.2%

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Revenue vs. employment growth



Number of households



SOURCE: WWW.IBISWORLD.COM

Key External Drivers

- Number of cable TV subscriptions

 - Number of households

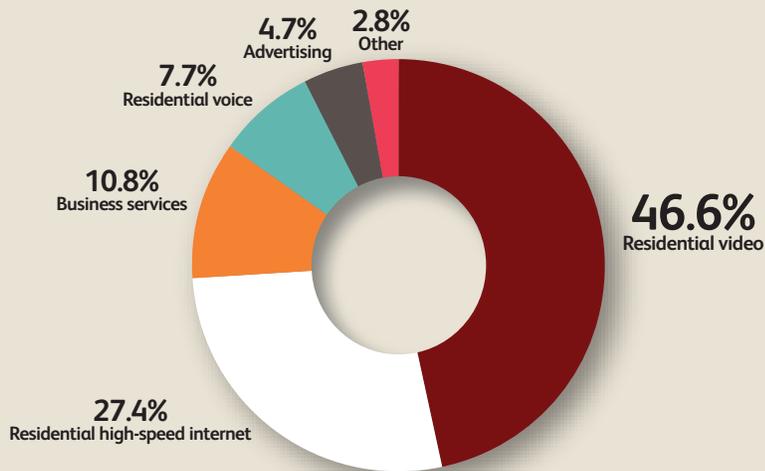
 - Number of broadband connections

 - Per capita disposable income

 - Consumer Confidence Index

- p. 5

Products and services segmentation (2015)



SOURCE: WWW.IBISWORLD.COM

Industry Structure

Life Cycle Stage	Mature	Regulation Level	Heavy
Revenue Volatility	Low	Technology Change	High
Capital Intensity	High	Barriers to Entry	High
Industry Assistance	None	Industry Globalization	Low
Concentration Level	High	Competition Level	Medium

FOR ADDITIONAL STATISTICS AND TIME SERIES SEE THE APPENDIX ON PAGE 36

Industry Performance

Executive Summary | Key External Drivers | Current Performance
Industry Outlook | Life Cycle Stage

Executive Summary

Cable providers disseminate TV programming from cable networks to consumers; they offer consumers video programming, high-speed internet access and digital voice telephony services, often bundled in a single package. In the five years to 2015, industry revenue is expected to expand an annualized 4.2% to \$115.9 billion due to rate adjustments and subscriber upgrades. The number of broadband internet connections has increased dramatically over the period, further supporting industry growth.

The industry faces competition from businesses that offer similar services as

revenue is expected to increase 2.3% in 2015. However, greater marketing costs and price-based competition are expected to cut into industry profit.

Recent events have significantly reshaped the industry. The Federal Communications Commission (FCC) has reclassified high-speed internet as a telecommunications service, allowing it to regulate broadband internet service as a public utility. This will prevent cable providers from sharing the cost of infrastructure investments with content companies, potentially cutting into profit margins. Meanwhile, a planned merger between Comcast and Time Warner Cable was abandoned following both companies' concerns that federal antitrust investigations would likely make such a deal impossible.

In the next five years, the industry is expected to benefit from the addition of high-speed internet subscribers and upgrades to higher-margin digital cable services. Although bundling is expected to continue to drive subscriptions to the industry's core services, cable companies are expected to offer slimmer and lower-cost bundles to entice potential cord cutters with cord-shaving options. Nevertheless, high market penetration and changing consumer preferences will likely lower cable subscriptions further. Industry revenue is expected to grow an annualized 2.8% to \$133.1 billion in the five years to 2020.

The industry is expected to benefit from upgrades to higher-margin digital cable services

well as from new substitutes for TV programming, such as online video streaming. Internet streaming companies recently began acquiring original content, decreasing revenue derived from cable TV, the industry's core product. Telecommunication providers bundling video, high-speed data, voice services and wireless services, combined with the increasing number of households converting to wireless-only, has also decreased revenue from telephony services. Nevertheless, due to an increase in broadband internet connections and the introduction of cable Wi-Fi, industry

Key External Drivers

Number of cable TV subscriptions

The industry has been facing significant external competition, as consumers can now watch TV shows on networks' websites or through streaming services. Industry operators and their competitors have bundled their services with internet, telephone and similar services to generate more demand and higher

average revenue per subscriber. Nevertheless, the number of cable TV subscriptions is expected to decrease during 2015, representing a potential threat to the industry.

Number of households

Residential households are the industry's main market segment. A relatively stable

Industry Performance

Key External Drivers continued

percentage of households subscribe to industry services, suggesting that a crucial driver of industry performance is the total number of households. The number of households is projected to increase in 2015.

Number of broadband connections

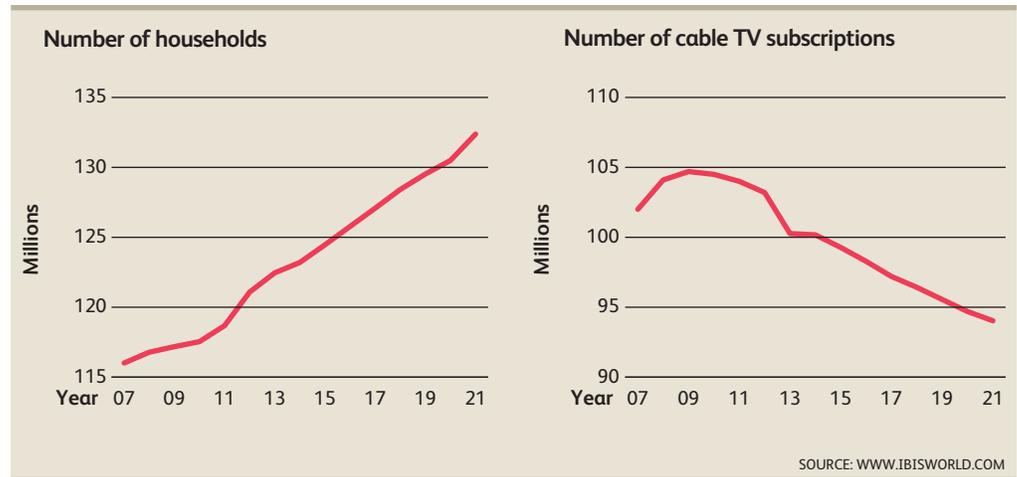
In addition to cable TV service, cable providers offer broadband internet access in bundled packages. When more consumers purchase broadband internet connections, industry revenue increases because cable companies can typically sell more expensive subscription plans. The number of broadband connections is expected to increase during 2015, representing an opportunity for the industry.

Per capita disposable income

The industry is sensitive to changes in economic activity. As households review their expenditures, especially during economic downturns, they may cancel their cable TV subscriptions to save money. Per capita disposable income is expected to increase in 2015.

Consumer Confidence Index

Changes in consumer sentiment directly affect discretionary expenditure, particularly on high-priced, value-added services. These expenditures decline when economic activity falters because consumers choose to pay down loans, save more and conserve available income for basic needs. The consumer sentiment index is expected to increase in 2015.



Industry Performance

Current Performance

The Cable Providers industry disseminates TV programming from cable networks to consumers, and also provides high-speed internet access and digital voice telephony services. These three core products are typically bundled in a single package. In the five years to 2015, growth in high-speed internet subscribers and a rise in consumer spending have driven industry growth. Over this period, revenue is expected to increase at an annualized rate of 4.2% to \$115.9 billion, including growth of 2.3% in 2015 alone. While the number of broadband internet connections has grown over the past five years at a robust annualized rate of 15.6%, the number of cable TV subscriptions has declined an annualized 1.0% amid market saturation



and heightened competition. The interplay of these two conflicting trends has moderated industry growth throughout the past five years.

Volatile demand

Cable TV subscriber growth is sensitive to changes in economic factors, particularly household disposable income. This variable, in turn, depends on fluctuations in the labor market, tax and interest rates and gas prices. Downward trends in household disposable income can lead to a rise in customer churn, which is the rate at which customers discontinue their service. When disposable income

contracted during the recession and its aftermath, sales of higher-margin, value-added services suffered. Higher programming costs and increased competition also ate into profit margins as companies lowered prices to retain and attract customers. These challenges continue to loom over industry profitability, even as it recovers due to a steadier economic environment and slightly higher consumer spending.

Vertical integration and consolidation

Programming license fees charged by cable networks, as well as fees for the retransmission of local broadcast TV stations' signals, affect operator expenses. Since programming expenses have increased over the past five years, operators in the industry have increasingly combined their operations with upstream cable networks. By vertically integrating with programming producers, cable providers can produce a greater portion of their programming

in-house, mitigating the effect of rising programming costs and improving their competitive position. The most recent merger for this purpose, between Comcast and NBCUniversal (NBCU), was approved in early 2011.

While most industry operators are vertically integrated to some extent, Federal Communications Commission (FCC) regulations restrict the level to which integration can occur, and ensure that no company blocks another's access

Industry Performance

Vertical integration and consolidation continued

to content. This issue has become a point of contention with many smaller industry operators, especially since the approval of the Comcast and NBCU merger.

As cable providers have sought to secure content from upstream programming networks, vertical integration and industry consolidation has increased. As a result, the number of enterprises is expected to fall at an annualized rate of 3.5% to 845 in the five years to 2015. As with broadcast TV, affiliations between major and minor cable networks have grown in importance because of increased competition.

Competition from wired telecommunications carriers has also intensified since 2005, when carriers began offering internet protocol TV (IPTV) services to certain consumers. The industry has responded to heightened external competition through acquisitions and heavy marketing.

Most recently, Comcast announced its plan to acquire Time Warner Cable (TWC), which would have combined the largest two cable operators. Although the

two companies had agreed to the deal initially, the deal faced significant regulatory scrutiny by the FCC and the Justice Department due to potential antitrust concerns. Both parties ultimately walked away from the deal in April 2015.

Additionally, after online streaming company Netflix agreed to pay Comcast to directly access its broadband network and provide smooth streaming to Comcast customers, the FCC announced its plan to regulate broadband internet service as a public utility. In February 2015, the FCC voted to reclassify high-speed internet as a telecommunications service, instead of an information service, under Title II of the Telecommunications Act. This ruling is expected to ensure that no content is blocked and that the internet is not divided into express lanes and slow lanes. With their voice and TV services under threat from external competition, industry players can now add regulation of their high-speed internet services to the long list of factors limiting revenue growth.

New players

Demand for the industry's core product, cable TV subscriptions, has suffered over the past five years. The pay-TV market is highly saturated and, amid heightened external competition from wired telecommunications carriers and satellite TV providers, cable providers have struggled to add new subscribers. This has led the number of cable TV subscriptions to decline 1.0% per year on average to 94.7 million over the five years to 2015.

The industry is also confronting new competitors in the cable TV segment, such as on-demand internet streaming companies. For example, Netflix, a subscription streaming service for movies and TV shows, began broadcasting independently acquired TV shows,

Amid heightened external competition, cable providers have struggled to add new subscribers

making entire seasons available at once. Soon after, Amazon began investing in original programming, while Google opened production facilities to develop YouTube content. Moreover, start-up companies are beginning to develop their own channels and networks. Additionally, the development of Google's Chromecast has helped consumers view online content on their TV screens. These recent developments are expected to

Industry Performance

New players continued

further decrease industry operators' revenue from cable TV. Cable subscriptions decreased as a proportion of total industry revenue from 51.0% in 2012 to 46.6% of in 2015, and consumers continue to migrate to other forms of content distribution. According to Nielsen's September 2014 Cross Platform Report, time spent watching traditional TV has decreased while the number of households only using broadband streaming has risen significantly.

The telephony services segment is also encountering new competitors. Wireless communication pioneers AT&T and Verizon are aggressively marketing and selling bundles of video, high-speed data, voice services and, in contrast to cable providers, wireless services. Additionally, a decreasing number of households are subscribing to wired phone service. According to CTIA-The Wireless Association, as of December 2013 (latest available data), 41.0% of US households were wireless only, up from 20.2% in 2008. Furthermore, the number of mobile telephone subscriptions increased substantially in the five years to 2015, reinforcing wireless-only households while also cutting into the telephony segment's revenue and profit.

Nevertheless, developments in the past five years have presented ample opportunities for industry growth. An increasing percentage of services conducted online and the proliferation of digital content have stimulated strong demand for faster and more robust internet connections. This, in turn, has increased the percentage of revenue that cable providers derive from high-speed internet connections. Voice over internet protocol (VoIP) services, which transmit voice communications over internet infrastructure, have also improved in reliability and speed, stimulating growth in demand for this product segment; however, this growth has been limited by the invasion of telecommunication carriers. Nevertheless, increased demand for internet access helped mitigate the negative effects of canceled cable TV subscriptions and lower VoIP revenue over the period. This has had a positive impact on employment, though not strong enough to offset the decline caused by fewer enterprises. Employment declined an average annual 4.1% to 189,373 workers over the five years to 2015. Wages, meanwhile, have increased an annualized 1.9% to \$19.2 billion.

Branching out

According to Heavy Reading, an independent research organization, cable providers have pushed into the Wi-Fi space; they have increased their broadband mark and spent more than \$175.0 million to deploy more than 250,000 hotspots by mid-2014. Additionally, in 2010, Comcast, Time Warner Cable (TWC), Cox Communications, Cablevision and Bright House Networks formed a "Wi-Fi Alliance" to enable each of their subscribers to use every provider's hotspots. In August 2012, Comcast, TWC, Bright House and Cox

Cable providers have increasingly pushed into the Wi-Fi space

announced the sale of their wireless spectrum to Verizon, agreeing to market Verizon's service. Cablevision, however, is still expanding its Wi-Fi hotspots, in the belief that fast and reliable Wi-Fi has strong growth potential. This new venture is expected to slightly increase industry revenue in the five years to 2020.

Industry Performance

Industry Outlook

The Cable Providers industry is forecast to grow over the five years to 2020, benefiting from higher per capita disposable income and increased consumer sentiment. As in years past, cable TV subscription rates are expected to decline amid intense competition and market saturation. The number of cable TV subscriptions is forecast to decrease 1.0% per year on average over the five-year period. However, this decline is expected to be offset by a continued increase in high-speed internet subscribers, as well as a greater portion of remaining cable TV subscribers paying for more expensive, higher-margin programming packages. In the five years to 2020, revenue is forecast to grow at an annualized rate of 2.8% to \$133.1 billion.

Demand for higher-priced, value-added services and packages is expected to rise in the next five years. Solid growth in revenue will continue as households transfer from basic cable to its more expensive digital counterpart. This shift

will largely be assisted by the bundling of services, an expanded number of channels, new services (particularly video-on-demand and interactive TV) and high-definition channels. These trends will spur revenue growth, even as the number of cable TV subscriptions declines. Although these premium services generate more revenue for operators, earnings will likely be reinvested into marketing efforts and infrastructure additions to increase competitiveness, causing profit to increase only marginally. Online streaming companies are increasingly entering the market by offering their own original content, as well as by investing in the necessary infrastructure to increase name recognition. Throughout the next five years, external competition from the mature Satellite TV Providers industry (IBISWorld report 51711b) will remain the biggest threat to industry growth, with online streaming companies quickly catching up.

High-speed internet demand

In the next five years, the Federal Communications Commission (FCC) will continue its plans to expand broadband access to more than 100.0 million households, mainly in rural areas. While providers of internet access, such as cable providers, will have to pay into the newly created Connect America Fund to help subsidize this expansion, such expenses will be offset by the revenue increase offered by new customers.

Rising internet traffic increases demand for cable providers, but industry operators will need to invest heavily in the next five years to take advantage of this increase. Online traffic has been growing at an exponential rate, whereas network capacity has been growing linearly. Additional demand for internet infrastructure will come from wireless providers, whose networks are running at

Increasing demand and internet usage will likely encourage usage-based pricing

high but not full capacity. Companies that can provide these carriers with data storage or extra bandwidth will benefit from the wireless shortfall. Cable providers that offer mobile backhaul (i.e. linking cell towers to switching stations), such as Cox, are anticipated to experience particularly strong revenue growth in the five years to 2020.

Increasing demand and internet usage, coupled with the desire for more control over network traffic, will likely encourage the move toward usage-based pricing.

Industry Performance

High-speed internet demand continued

Cable providers will start to charge users in proportion to the amount of data they consume, with monthly charges for those who go over a set amount. Companies in the telecommunications sector view usage-based pricing as an effective means of capitalizing on increased internet traffic. However, as internet access becomes ubiquitous throughout the United States and a larger part of daily life, consumers will become increasingly critical of how online content is managed.

The management of online content will render net neutrality, the principle of treating all internet traffic the same, an issue of increasing contention. Recently, the FCC announced that it would regulate broadband internet service as a public

utility, reclassifying high-speed internet as a telecommunications service rather than an information service. This ruling is expected to have a major impact on the competitiveness of content providers, especially given that Comcast owns NBCUniversal. It is also expected to limit the revenue generated from high-speed internet access. Additionally, industry players have claimed that creating a fast lane would spread the cost of infrastructure investments. Not being able to charge companies like Netflix a higher price for streaming will mean that industry players will pay for infrastructure updates on their own, thus increasing their capital expenditures and, likely, the prices of their services.

Increasing competition

In the next five years, external competition from direct-broadcast satellite operators and wired telecommunications carriers will escalate. These operators have already significantly penetrated the market for TV and internet services. Wired telecommunications carriers in particular are increasingly focusing on expanding their fiber-optic networks, which offer superior internet speeds compared with traditional cable networks. A recent merger between telecommunication giant AT&T and satellite TV giant DirecTV further caused ripples in the Cable Providers industry, as increasingly powerful internet and TV providers fight ferociously for consumers' internet and TV dollars. As a result, cable providers that fail to innovate or upgrade their network infrastructures and value-added services may lose out on growing demand for internet access to these external competitors.

Online streaming companies, such as Netflix and Amazon, have begun to enter the TV market. In January 2012, Netflix

Online streaming companies have begun to enter the TV market

released its first original TV show, bypassing cable operators altogether while also penetrating their market and adding millions of new US streaming subscribers as a result. In June 2013, it announced an exclusive deal with DreamWorks Animation, furthering its infiltration into the TV market. Furthermore, by 2016, Netflix is expected to have exclusive first-run rights to Walt Disney Co. movies when they leave theaters. Amazon and Hulu are also fighting to enter the market, while Google is planning to provide an internet form of cable-like services, streaming live channels and on-demand shows. The release of Chromecast, a small device that uses Wi-Fi to transmit Netflix and other video and audio content onto any high-definition television, has helped the company to further penetrate the market. This strong

Industry Performance

Increasing competition continued

intrusion of online streaming companies is expected to limit the revenue and profit growth of cable companies in the five years to 2020, as cable providers fight to differentiate their products.

Although the cord-cutting trend has accelerated, and the pay-TV market lost more subscribers in 2014 than it had in 2013, cable providers have succeeded in slowing video customer losses and have even attracted some satellite TV customers. In an attempt to prevent cord cutters from taking the last step into the zero-TV space, the cable industry is offering smaller and less expensive bundles of channels. However, the battle to maintain customers is only just beginning; Sony Corporation, HBO and CBS have already launched their own premium streaming services, bypassing the industry entirely.

As competition continues to escalate, the selection of interactive services will likely become more extensive and the migration of customers from basic services to digital ones is expected to increase. As external competitors capture a greater share of the industry's customer

base, industry consolidation pressures will remain significant, especially among smaller cable providers. Small providers are feeling increasingly threatened by mergers within the industry, as well as among telecommunication and satellite providers. As ballooning industry giants capture a rising share of internet users and TV viewers, their market share and pricing power is expected to increase further. Smaller cable operators spoke out against the AT&T-DirecTV merger, saying that the combined company would wield too much power in the creation, distribution and cost of programming. Consolidation may result in fewer choices and higher prices, with which smaller operators may not be able to compete. As a result, the number of industry enterprises is forecast to decrease at an average annual rate of 1.1% to 800 in 2020, with employment expected to increase a slow annualized 0.3% to 191,872 workers over the same period. As the industry faces increased competition, regulatory pressures are expected to ease slightly, particularly those connected to prices charged for basic services.

Branching out

Cable providers have entered the race to control the new smart home. The cable giants are expected to compete with telecommunication providers, appliance makers and a series of third-party start-ups to connect with, monitor and manage connected hardware in the home. Time Warner Cable, the cable industry's largest player, is already in the midst of buying Charter Communications. In addition, Comcast's acquisition of PowerCloud Systems indicates the company's intention to explore the smart home market. PowerCloud

Cable providers have entered the race to control the new smart home

provides system solutions for mobile Wi-Fi patrons in environments like hotels, retail chains, restaurants and managed care facilities. Although the smart home industry is still in its infancy, many companies from different industries are attempting to enter it early; it remains to be seen if cable operators will get a slice of it.

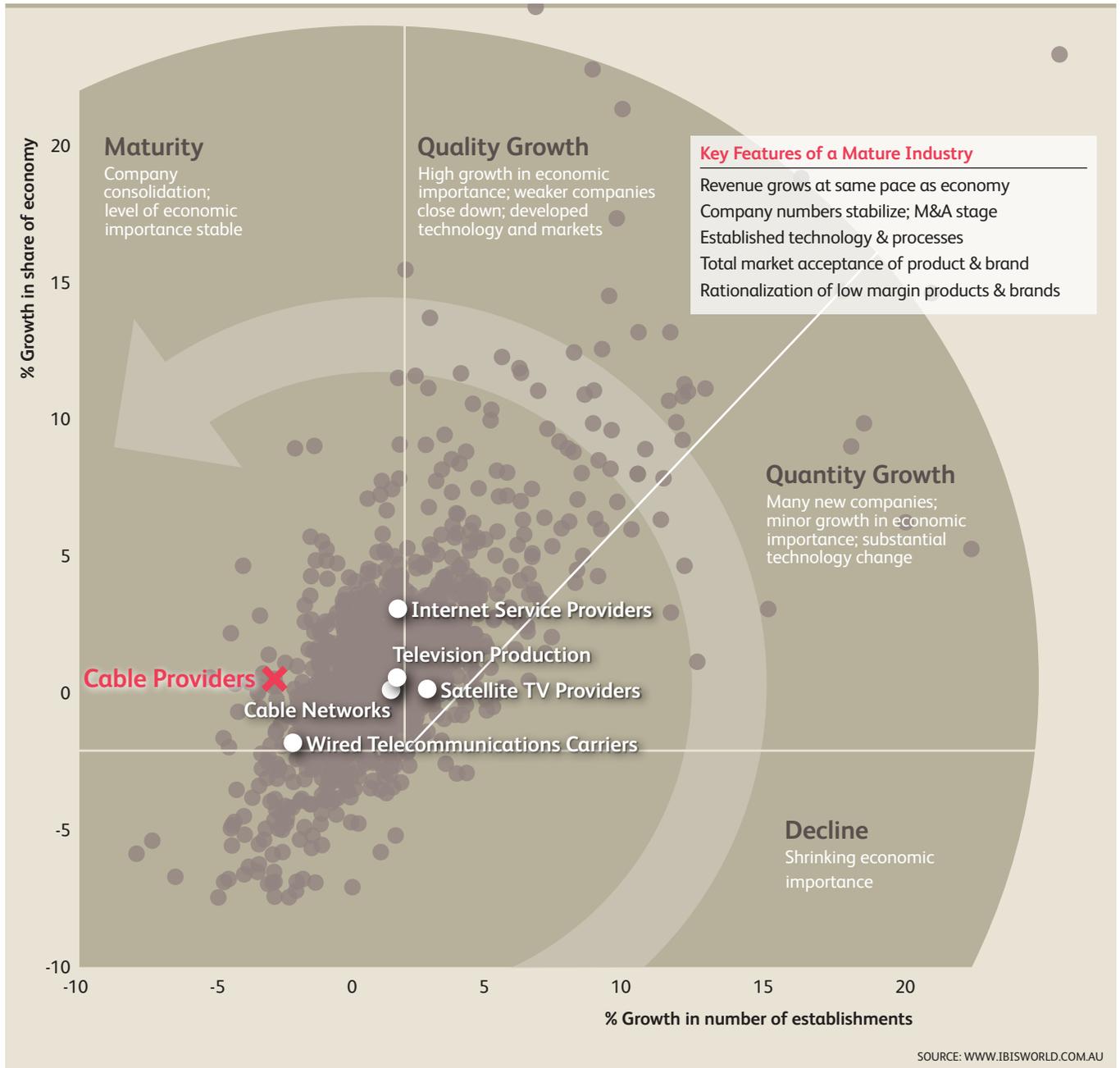
Industry Performance

Life Cycle Stage

Industry value added growth lags GDP growth

Bundled services have increased demand for the industry

Intense competition limits the industry's growth prospects



Industry Performance

Industry Life Cycle

This industry is **Mature**

The Cable Providers industry is in the mature phase of its life cycle. In the 10 years to 2020, industry value added (IVA), a measure of the industry's contribution to the economy, is forecast to grow at an annualized rate of 2.8%. In comparison, GDP is expected to increase at an annualized rate of 2.2% during the same period. Consolidation in the industry is revealed by the 2.3% decline in enterprises over the 10 years to 2020. While the industry's basic, nondigital cable services (which have been in existence since the 1950s) have been declining in subscriber numbers and prominence, premium digital cable has increasingly replaced these basic services. Digital services have a higher price point and have helped mitigate revenue losses from canceled subscriptions. There has also been significant merger activity between cable operators and upstream content producers.

Offering bundled services has been a major driver of revenue growth for the industry during the past five years. These

services include telephony, high-speed internet and video services. Exponential growth in the amount of traffic on the internet, which largely uses the same infrastructure as cable television, has increased demand for robust internet connections. By offering internet and cable as one product, demand for these connections has increased demand for all of the industry's product offerings.

The Cable Providers industry is facing increasing competition from satellite telecommunications carriers, satellite TV providers, wired telecommunications carriers and online streaming companies. All of these external competitors offer some or all of the services that the industry offers. Since the pay-TV and internet access markets are highly saturated, competition for subscribers has increased significantly in the past five years. As this trend persists throughout the entire telecommunications and broadcast distribution sector, price-based competition and increased marketing costs will moderate industry revenue growth.

Products & Markets

Supply Chain | Products & Services | Demand Determinants
 Major Markets | International Trade | Business Locations

Supply Chain

KEY BUYING INDUSTRIES

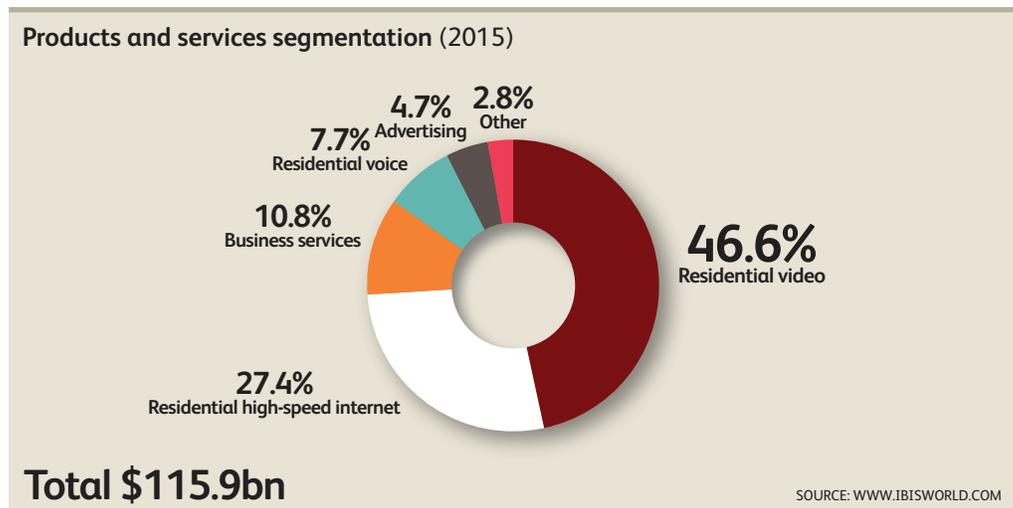
9901 Consumers in the US
 Households are the major clients of this industry, becoming increasingly dependent on internet and phone services.

KEY SELLING INDUSTRIES

51211b Television Production in the US
 Cable providers purchase TV shows and programs from the TV producers.

51521 Cable Networks in the US
 Cable providers purchase TV programs for a fee or subscriptions from cable networks that operate in studios and other facilities.

Products & Services



Since cable television’s inception, the Cable Providers industry’s product has evolved from a standard, limited-channel package to an array of different programming packages. In the past five years, more robust infrastructure has given the industry the opportunity to increasingly offer interactive services to consumers, such as video-on-demand and pay-per-view. Additionally, the majority of the industry’s services are typically bundled together and offered as one product.

Residential video

Despite subscriber upgrades and the development of new products in the past five years, including digital and pay-per-

view services, the majority of video services revenue is still expected to come from basic programming and subscriber packages. Although widespread high-speed internet access has had a negative effect on cable TV subscriptions because consumers can now watch TV shows on networks’ websites or through streaming services, it has also greatly increased the number of channels that cable providers are able to offer. Furthermore, throughout the past decade, cable TV shows have won an increasing share of the major TV awards in comparison to network shows, helping increase the profile and popularity of cable programming. Basic cable packages are

Products & Markets

Products & Services continued

expected to decrease as a percentage of revenue in the next five years.

A significant percentage of video services revenue is generated from premium and digital services, which offer additional value-added services at a higher cost to subscribers. In the past five years, most major cable operators reported a decline in their basic subscriber numbers as households upgraded to premium cable or switched to satellite packages. Premium cable packages typically offer bundled services (including telephony and internet access) at a premium price, which has increased their appeal among consumers in recent years. As pricing of these packages decreases amid fierce competition, and as the array of programming and value-added services offered increases, premium cable packages are expected to increase as a percentage of revenue over the next five years.

Cable providers now offer video-on-demand and pay-per-view services to compete directly with internet streaming and its ability to deliver content at any time. For basic cable subscribers, the industry supplies the rebroadcast of free-to-air TV channels and a small selection of paid channels. The industry is expected to face new, fierce competition from internet streaming companies. In 2012, Netflix, a subscription streaming service for movies and TV shows, began acquiring original content, completely bypassing network and cable operators. Amazon soon unveiled original comedy and TV shows distributed over its own streaming service. Google has also opened production facilities to create original programming. As new companies enter the market, the video services segment of the industry is expected to face heavier competition.

Residential high-speed internet

High-speed internet services have increased markedly as a percentage of revenue in the past five years. This product segment

accounts for an estimated 27.4% of industry revenue. As internet connections have grown more robust, streaming content has become more feasible, decreasing demand for the industry's core cable TV product. As the internet cements itself in the daily lives of consumers and businesses alike, demand for wired internet access continues to grow. As a result, this product segment is expected to continue to increase as a share of revenue in the next five years, mostly at the expense of the video services product segment and, to some extent, at the expense of voice services as households increasingly become wireless-only. Notably, cable providers face external competition from satellite telecommunications carriers and wired telecommunications carriers, both of which offer their own internet services.

Residential voice

Cable providers have driven adoption of their voice over internet protocol (VoIP) telephone services (i.e. voice transmitted as data packets over the internet) in the past five years by bundling these services with core internet and video services. Moreover, as internet connections have improved, VoIP services have become more robust and reliable, driving demand for this product segment. VoIP services mesh well with internet services because they use the same network infrastructure and protocol. Consequently, offering these services has been relatively easy for cable providers. Increasing demand driven by their low cost and reliability, however, has been offset by the increasing number of household that are becoming wireless-only. As of December 2013 (latest data available), 41.0% of US households were wireless-only, up from 20.2% in 2008.

Business services

Services offered to small and midsize businesses have increased in prominence in the past five years as a greater number of offices throughout the country have shifted some or all of their workload online. These

Products & Markets

Products & Services continued

services include the industry's traditional core services that are offered to consumers, as well as website hosting services, tools that facilitate sharing and transferring documents online, hosted voice services using networked servers, business directory listing and the capacity for multiple VoIP phone lines.

Advertising and other

Advertising revenue is generated through the sale of scheduled advertising time on cable networks,

and cable providers are typically allocated advertising space to sell as part of their distribution arrangements with cable networks. Equipment rentals revenue has also grown due to the rental of digital video recorders (DVRs), which enable users to pause and rewind "live" television. Many companies in this industry offer free installation services for equipment or allocate customer service personnel toward assisting customers with equipment installation.

Demand Determinants

Demand from households for access to cable TV, internet and phone services is largely determined by trends in household disposable income, particularly for services above basic subscriptions. Less expensive substitutes for cable services, such as satellite services, over-the-air TV broadcasts and internet-based video broadcasting, have all decreased industry demand in the past five years.

Digital programming services are typically bundled with telephony, high-speed internet and other two-way services, including interactive TV and video-on-demand. These bundles offer a range of services at a competitive price when compared with subscribing to these services individually. This new trend has encouraged lower subscriber turnover because individual services cannot be easily unbundled without affecting the price paid.

The quality of cable TV transmissions has increased as the industry and its consumers adapt to new technologies. Nonetheless, with increasing competition from other media, cable TV providers must offer services at the forefront of high-quality standards and incorporate innovative technologies. For example, as more consumers purchase 3D TVs, demand for 3D networks and shows is increasing.

Cable providers are also taking advantage of two trends: the need for internet everywhere and the consumer preference of having all services from a single provider. The number of hotspots owned by the Cable Providers industry has rapidly increased, rising from 200,000 in 2013 to 250,000 by mid-2014 and satisfying consumers' thirst for internet availability. Demand for Wi-Fi is expected to increase because consumers prefer having one provider for all services.

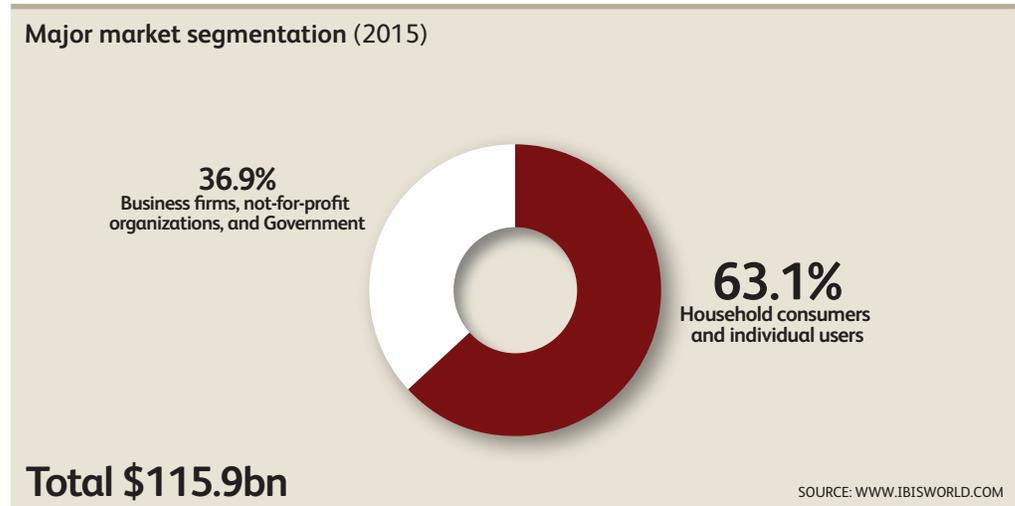
Major Markets

Industry data indicates that 63.1% of revenue is derived from the residential market and 36.9% from businesses and the public sector. Small and midsized enterprises are increasingly purchasing industry services as they shift their workload onto the internet and transfer

hard copy physical storage to cloud-based storage. The education market is also significant, though services are provided to this market on a subsidized or free basis because of an initiative started in 1989. This initiative, which started through the Cable in the Classroom

Products & Markets

Major Markets continued



national education foundation, provides access to more than 500 hours of educational TV programming and online resources from cable networks to children of all ages.

There has been intense external competition in the residential market as wireless services encourage consumers to drop their wired phone services and streaming companies offer a substitute to cable TV, the industry's largest service. According to the US Department of Health and Human Services, a significantly higher percentage of children live in wireless-only households than adults. While 65.7% of adults 25 to

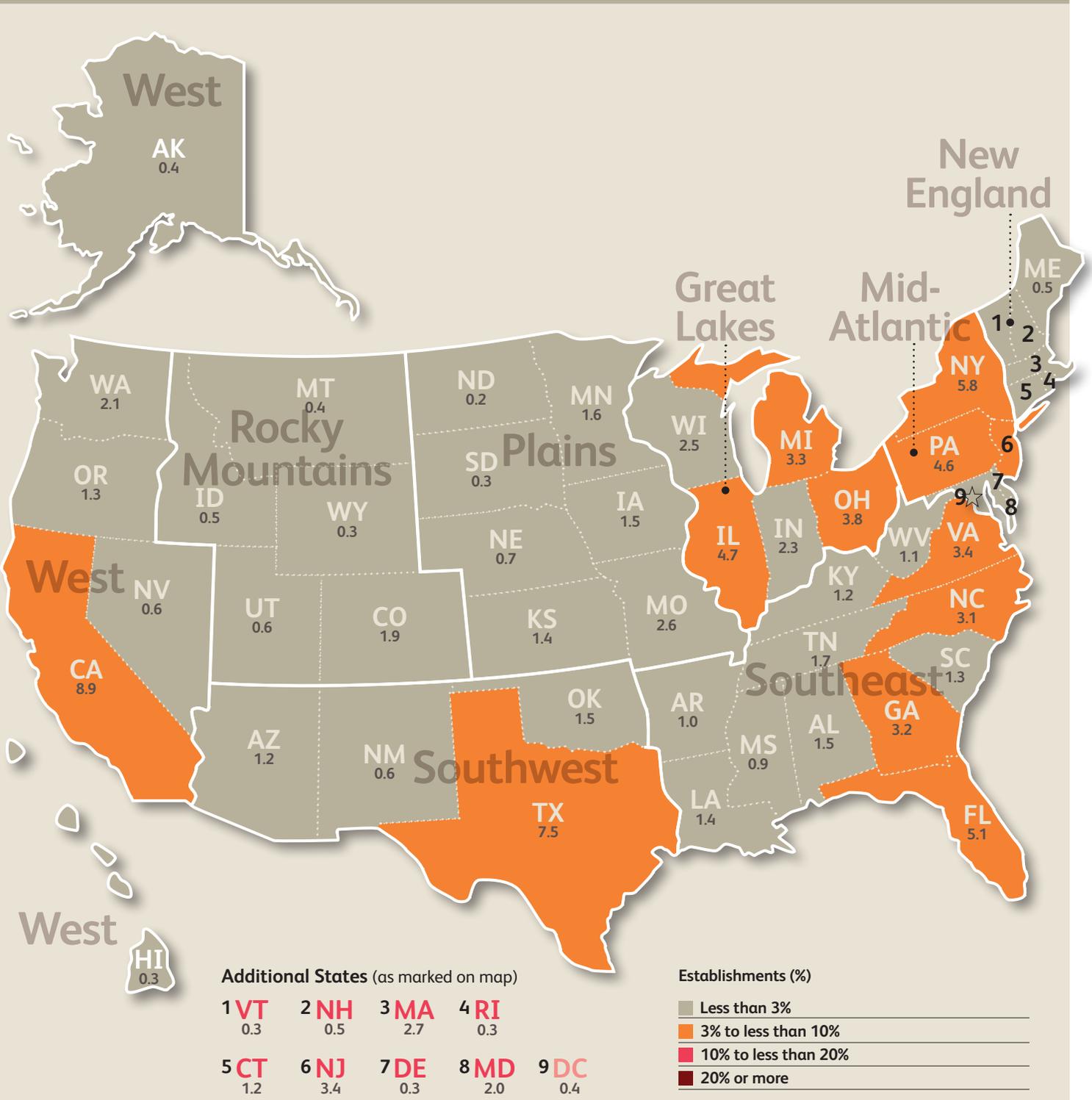
29 years old live in wireless-only households, this occurs among only 47.8% of consumers between the ages of 35 to 44. Younger consumers are drifting away from cable and voice services, decreasing overall market revenue, as they increasingly shift to cord-free households. Within this market, there has been a significant migration of basic subscribers to new digital cable services. These new services feature better-quality audio and visual services and new bundled services, including video-on-demand and high-speed data access. These services usually have a higher price point than basic services.

International Trade

Due to the service-based nature of this industry, cable providers do not engage in any international exchange of goods.

Products & Markets

Business Locations 2015

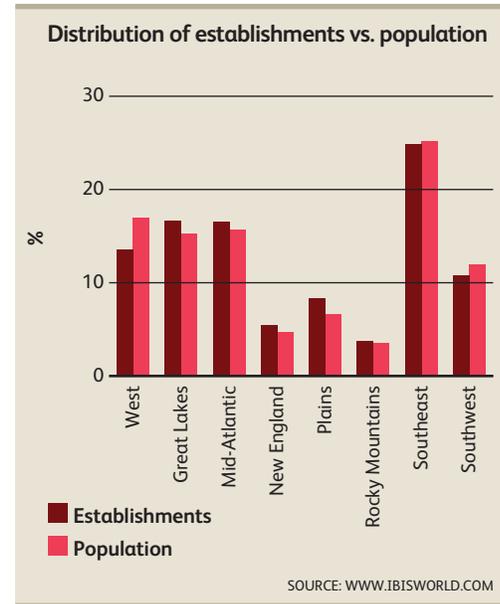


Products & Markets

Business Locations

In terms of establishment and revenue shares, the industry is generally spread according to regional concentration of the population. Major metropolitan areas are especially vital centers for the industry's largest companies, since these areas serve as both an area to establish corporate headquarters as well as provide services to a large pool of customers throughout the region. The Southeast has the largest share, with 24.9% of all establishments in the industry. Meanwhile, the Mid-Atlantic houses 16.6% of industry establishments and the West has 13.6%. In the West, California houses an estimated 8.9% of industry establishments and is critically important as a link to major entertainment production industries. The next largest state by establishments is Texas with 7.5%, followed by New York with 5.8%.

Vertical integration with content producers is anticipated to shift the concentration of industry establishments more toward the New York and Los Angeles regions, where major TV and film networks are located. Comcast Corporation, for example, operates cable TV services, broadband internet services and has significant stakes in TV



production companies including NBCUniversal and its Bravo and E! cable TV channels. While significant vertical integration will make it necessary for major cable providers to expand services in major metropolitan regions, suburban and rural subscription rates will remain vital sources of revenue through which cable providers will continually expand their service infrastructure.

Competitive Landscape

Market Share Concentration | Key Success Factors | Cost Structure Benchmarks
Basis of Competition | Barriers to Entry | Industry Globalization

Market Share Concentration

Level
Concentration in this industry is **High**

The Cable Providers industry is highly concentrated, with the top five players generating an estimated 84.1% of revenue. Market share varies among individual operators due to their different ratios of lower-priced basic service subscribers to higher-priced premium subscribers. The industry's largest companies attract subscribers by offering bundled voice, video and data services together as one product. Offering an array of different services necessitates a large infrastructure and support staff and generally precludes smaller, less-established operators.

Throughout the past five years, large cable providers have vertically integrated with cable networks to cut down program costs and supply and deliver more exclusive content. Currently, eight of the top 20 video

programming networks (ranked by subscriber numbers) are vertically integrated with a cable provider. According to Comcast's annual filings, consolidation in the cable industry parallels consolidation elsewhere in the telecommunication sector, and is a competitive response to challenges from direct-broadcast satellites, local exchange carriers and others. Having already spent more than \$175.0 million to deploy Wi-Fi hotspots, cable operators are planning to extend their broadband footprint by pushing into the Wi-Fi space. In April 2014, the "Wi-Fi Alliance" that includes Comcast, Time Warner Cable, Cox Communications, Cablevision and Bright House Networks pushed past 250,000 hotspots. The Alliance members enable each other's customers to access all the hotspots.

Key Success Factors

IBISWorld identifies 250 Key Success Factors for a business. The most important for this industry are:

Must have license and comply with regulation

Operators must be licensed by the FCC prior to operation and must meet all ongoing state and federal regulations. As regulations increase, so does the cost of complying with them.

Access to required utility infrastructure

Cable providers must have access to cable lines to maintain and develop the infrastructure through which they offer services.

Ability to quickly adopt new technology

Operators must offer the latest in interactive cable programming and the

fastest internet connections available to succeed in this industry.

Having an extensive distribution network

Owning and maintaining a well-developed, robust digital cable network enables companies to provide service to a significant number of households and businesses.

Access to niche markets

Understanding the programming and pricing needs of particular demographics is important to be able to attract new subscribers and have a low churn rate among existing subscribers.

Cost Structure Benchmarks

Cost structure, particularly profit, varies among companies in this industry. Cable providers have different infrastructure sizes and may upgrade their networks at different times, leading to variations in

year-on-year depreciation and profit. Profit also differs among companies depending on their access to exclusive content. Companies that are vertically integrated with content providers cut

Competitive Landscape

Cost Structure Benchmarks continued

down on licensing costs and command higher profit margins.

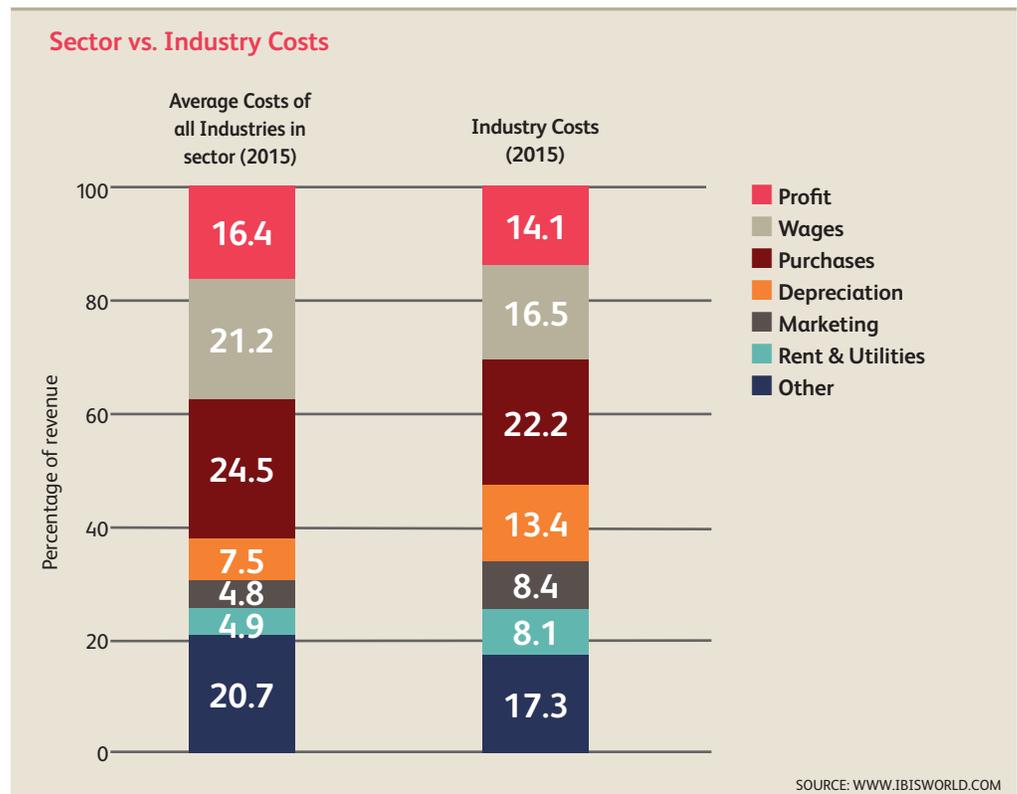
Profit

Average industry profit, measured as earnings before interest and taxes, accounts for an estimated 14.1% of industry revenue. The upfront costs of establishing a cable network are significant; however, once a suitable infrastructure is in place, companies that are able to spread these fixed costs over a large subscriber base turn a healthy profit. Industry profit has increased with the bundling of video, voice and data services, which are offered over the same infrastructure. Horizontally integrated cable providers are also able to spread their fixed costs over larger subscriber bases and across several different products. As competition increases, companies are expected to compete more aggressively on price, pressuring

profitability. However, decreases in purchase and wage costs are expected to decrease operating expenses. The introduction of cable Wi-Fi, allowing US cable customers to roam Wi-Fi networks, is expected to increase profit. Consequently, IBISWorld expects industry profit to grow slowly in the next five years.

Purchases

Industry purchases are primarily composed of costs related to acquiring networking equipment and programming. These costs are decreasing as industry players, such as Comcast, become vertically integrated with content suppliers. Many program agreements set fees at a minimum level and then levy a flat fee or percentage share of a provider's subscription revenue. Therefore, as the number of cable subscribers increases, so do the programming costs to distributors.



Competitive Landscape

Cost Structure Benchmarks continued

Purchases account for an estimated 22.2% of revenue.

Wages

Labor costs associated with servicing a large and dispersed subscriber base account for an estimated 16.5% of revenue. Wage expenses have slightly declined as a share of revenue as companies have implemented more automated customer service systems. This development has limited the need for skilled client services personnel and enabled companies to hire more workers to install systems and infrastructure. These workers are typically paid less than customer service personnel, which has caused the average industry wage to decrease in the past five years. As companies continue to streamline their operations and improve efficiency, all the while attempting to enter the new Wi-Fi market, wage costs

are expected to remain relatively static in the next five years.

Other

Marketing costs account for an estimated 8.4% of revenue and are increasing as competition escalates and companies vie for market share via TV and internet advertisements. Depreciation costs in this industry are inherently large. Infrastructure upgrades and facility improvements were implemented to bring customers higher-quality pictures, more programming options and two-way capabilities for on-demand services. As these upgrades are completed, depreciation costs are expected to decrease slightly in the next five years. Additionally, industry operators must purchase cabling, routers and associated network equipment, much of which is expensive and has a relatively short use life of 10 to 15 years.

Basis of Competition

Level & Trend
Competition in this industry is **Medium** and the trend is **Increasing**

Companies in this industry compete to attract subscribers on price, channel offerings and bundled services. While cable operators have always competed with each other, the industry has faced increasing external competition from satellite TV providers and mobile devices with broadband internet connections in the past five years.

Internal competition

Cable providers compete on price of the various levels of programming offered (e.g. basic versus premium), video and audio quality and customer service. Also important is the variety and quality of programming offered and the introduction of new services such as video-on-demand and digital video recorders. Companies have increasingly bundled internet, telephony and video services as one product. This has attracted customers who prefer the

convenience of having one provider for all of their services and has led companies to compete more aggressively on pricing.

Internet connection speeds are a key area of competition in the industry. Companies compete to offer the fastest and most reliable connections, but also to offer packages that provide the most utility to the consumer (i.e. the greatest amount of data available per dollar spent). Increasing competition from external fiber optic service providers has prompted cable providers to boost broadband speeds.

External competition

At the most basic level, the industry's external competition includes alternative forms of entertainment that do not require cable broadband. Broadcast TV also competes against this industry; however, competition from

Competitive Landscape

Basis of Competition continued

this medium has declined as a result of wavering viewership in recent years. Satellite TV services are also a significant source of competition and have increased in popularity.

The industry also faces external competition from wireless telecommunications carriers and content providers that are expanding streaming content offerings to smartphones and tablets. The number of cable TV subscriptions has been steadily decreasing over the past five years in response to consumers who are abandoning their cable packages in favor of original content that is distributed exclusively on the internet. The number of broadband connections, on the other hand, increased at a rapid rate over the past five years and is expected to further

increase, albeit more slowly, over the coming five years. The major companies in this industry have teamed up to form a Wi-Fi Alliance and extend their broadband footprint with about 250,000 new hotspots, allowing their customers to roam on each other's networks.

In addition, cable providers face competition from online streaming companies that are aggressively attempting to penetrate the cable TV market. Netflix was the first among them to broadcast original content, followed by Amazon and Hulu. Although cable providers still benefit from the additional internet usage their customers require to view these services, declining subscriptions in cable packages will ultimately contribute to declining industry revenue.

Barriers to Entry

Level & Trend
Barriers to Entry in this industry are **High and Steady**

Barriers to entry in this industry are high. The level of industry concentration presents a significant and practical barrier to entry. Existing operators command large economies of scale in operations and therefore can capture a much wider audience at a fraction of the cost per customer. Programming rights and infrastructure investment represent significant expenses for new operators entering the industry that cannot be recouped without acquiring a large subscriber base. Amid intense internal and external competition and the established brand names of the industry's largest operators, new entrants will struggle to acquire subscribers. Industry operators also face a high degree of regulation. There are extensive registration procedures and approvals required prior to

Barriers to Entry checklist

Competition	Medium
Concentration	High
Life Cycle Stage	Mature
Capital Intensity	High
Technology Change	High
Regulation & Policy	Heavy
Industry Assistance	None

SOURCE: WWW.IBISWORLD.COM

operating as a cable provider. Additionally, the high degree of vertical integration and collaboration between major cable providers and cable networks presents a challenge to new entrants acquiring the rights to a significant amount of content. Four of the top six cable providers hold ownership interests in content networks.

Competitive Landscape

Industry Globalization

Level & Trend
Globalization in this industry is **Low** and the trend is **Steady**

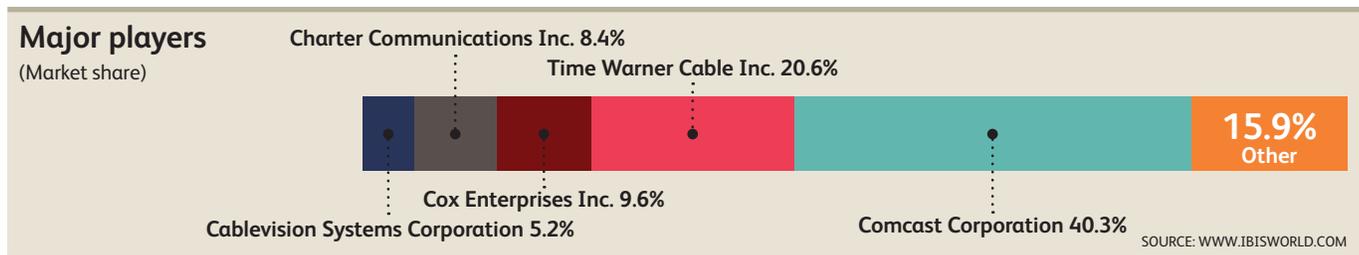
The industry has a low level of globalization. All of the industry's major players are US-owned and earn most of their sales from domestic activity. International programming is primarily distributed through satellite distribution

operators in foreign countries. IBISWorld analysis indicates that there are currently several foreign distributors that operate in the United States, suggesting that this industry may be subject to an increasing level of globalization in the future.

Major Companies

Comcast Corporation | Time Warner Cable Inc. | Cox Enterprises Inc.

Charter Communications Inc. | Cablevision Systems Corporation | Other Companies



Player Performance

Comcast Corporation
Market share: 40.3 %
Industry Brand Names
Xfinity

Pennsylvania-based Comcast Corporation, incorporated in 2001, operates in this industry through its cable communications segment. The company is the largest provider of video, high-speed internet and voice services to residential and business customers in the United States. It serves about 22.4 million video customers, 22.0 million high-speed internet customers and 11.2 million voice customers. Comcast's industry-relevant cable communications segment provides consumers and businesses with video, high-speed internet and voice over internet protocol (VoIP) telephony. Industry-relevant revenue amounted to \$44.1 billion in 2014 and is expected to increase 5.7% to \$46.7 billion in 2015.

Comcast's video services vary in degree, ranging from a basic service, with 20 to 40 channels of available video

programming, to a full digital service with more than 300 channels.

Additionally, the company offers consumers its on-demand service, which provides digital-video customers with almost 55,000 programming choices. Comcast's high-speed internet services vary across different geographic markets. In some areas, the company offers connection speeds of up to 505 Mbps. VoIP services include unlimited local and domestic long-distance calling, as well as value-added services.

In January 2011, General Electric signed an agreement to sell 51.0% of NBCUniversal to Comcast, establishing a new joint-venture company. The combined company increased its strength in broadcast and cable TV. Effective March 2013, Comcast acquired the remaining 49.0% interest in NBCUniversal Media LLC and, in

Comcast Corporation (cable communications segment) - financial performance*

Year	Revenue		Operating Income	
	(\$ million)	(% change)	(\$ million)	(% change)
2010	35,363.0	N/C	8,070.0	N/C
2011	37,226.0	5.3	8,893.0	10.2
2012	39,604.0	6.4	9,850.0	10.8
2013	41,836.0	5.6	10,811.0	9.8
2014	44,140.0	5.5	11,690.0	8.1
2015	46,656.0	5.7	12,825.0	9.7

*Estimates

SOURCE: ANNUAL REPORT AND IBISWORLD

Major Companies

Player Performance continued

October of the same year, the company announced an advertising partnership with NBCUniversal and Twitter's Amplify program. Accounting for about 20.0% of domestic TV viewers, Comcast is well positioned to grow revenue by producing and distributing more in-house broadcast content. Additionally, Comcast's acquisition of PowerCloud Systems in 2014 places it in the race for a piece of the smart home market.

Financial performance

In the five years to 2015, revenue from Comcast's cable communications segment is expected to grow at an annualized rate of 5.7% to \$46.7 billion.

The primary drivers of revenue growth have been basic subscriber upgrades to more expensive digital cable packages, an increasing number of high-speed internet subscribers, growing business services and rate adjustments. Revenue gained from upgrades has offset declines in the company's cable subscriber base. From 2011 to 2014, the number of video customers decreased largely due to high competition both within the industry and from satellite TV providers and wireless telecommunications carriers. Industry profit is expected to reach 27.5% of revenue as revenue from the company's cable communications segment increases.

Player Performance

Time Warner Cable Inc.

Market share: 20.6 %

Industry Brand Names
Roadrunner

Time Warner Cable Inc. (TWC) is headquartered in New York and is one of the largest cable operators in the United States. TWC provides video, high-speed data and voice services to about 15.2 million residential customers and 687,000 business customers. The company was legally separated from its parent company, Time Warner Inc., in 2008. TWC primarily services markets in New York, North and South Carolina, Ohio, Kentucky, Wisconsin, Southern California and Texas; 61.2% of TWC's customers

subscribe to two or more of its three primary services and 30.0% subscribe to all three. Industry-specific revenue amounted to \$22.8 million in 2014.

TWC's residential video services segment offers various levels of video programming that appeal to specific demographics. On average, a TWC subscriber receives over 200 high-definition channels and has access to a large selection of on-demand programming. Additionally, in 2011, the company began offering select

Time Warner Cable Inc. - financial performance*

Year	Revenue (\$ million)	(% change)	Operating Income (\$ million)	(% change)
2010	18,868.0	N/C	3,689.0	N/C
2011	19,675.0	4.3	4,069.0	10.3
2012	21,386.0	8.7	4,445.0	9.2
2013	22,120.0	3.4	4,580.0	3.0
2014	22,812.0	3.1	4,632.0	1.1
2015	23,926.0	4.9	4,907.0	5.9

*Estimates

SOURCE: ANNUAL REPORT AND IBISWORLD

Major Companies

Player Performance continued

programming in 3D. TWC also offers consumers several digital video recorder (DVR) services, which enable them to record, pause and rewind TV programming. The company also offers streaming programming services for computers and mobile devices.

In 2012, SpectrumCo LLC, a joint venture between TWC, Comcast and Bright House, sold all its wireless spectrum licenses to Cello Partnership, a joint venture between Verizon and Vodafone, for \$3.6 billion in cash. Time Warner Cable also acquired Insight Communications Company Inc. for \$1.3 billion and has begun carrying Al Jazeera America, the Qatar-owned broadcaster. The company announced the completion of the acquisition of DukeNet Communications LLC in 2014 and, most recently, Comcast proposed the acquisition of TWC, which would have combined the two largest cable providers; the deal was ultimately abandoned in April 2015.

Financial performance

Over the five years to 2015, TWC's industry-relevant revenue is expected to grow at an annualized rate of 4.9% to \$23.9 billion. Revenue growth throughout the five-year period has been primarily due to aggressive marketing and regional expansion of services, particularly in Southern California. The company has also invested heavily in infrastructure during this time, helping to improve profitability. Additionally, the upgrade of subscribers to higher-priced digital services and other value-added products, such as DVR services, has increased segment revenue. Furthermore, while the company reduced its workforce 3.0% to cut costs in 2009, it has increased its hiring in recent years. Profit is expected to reach 20.9% in 2015, due to the company's acquisitions of Insight in 2012, which increased its residential and business customers, and DukeNet Communications in 2013, which bolstered its Southeast presence.

Player Performance

Cox Enterprises Inc.
Market share: 9.6 %

Cox Communications Inc. (CCI) is headquartered in Atlanta and was founded in 1962. It currently provides cable TV, internet and phone services to about 6.0 million customers. In late 2004, CCI became a private company after Cox Entertainment acquired all of the publicly owned minority shares in the company. Consequently, the company does not report all of its financial information.

CCI has steadily increased its involvement in the provision of TV content over the past five years. The company has been able to supplement income from its core services by providing wireless backhaul services (i.e. transferring data from a provider's edge networks to its core networks) to wireless telecommunications companies. In April 2013, CCI partnered with Connect2Compete, a

nonprofit that partners with internet providers to provide discounted internet programs. Since June 2013, Cox Business Hospitality has offered Wi-Fi with a professional network design, integrated wireless network monitoring and guest troubleshooting and support, serving guest rooms with TV, internet and voice services.

In January 2012, the company introduced TV Economy, a low-cost cable option. In the same year, CCI filed suit in federal court in Delaware against Sprint Nextel, its former business partner. The complaint of patent infringement is a reaction to the suit filed by Sprint in December, claiming that CCI, TWC and Comcast infringed on its patents. Meanwhile, Verizon Wireless and CCI began selling each other's services and, in July 2013, the two companies announced a

Major Companies

Player Performance continued

partnership to offer new video, phone, internet and wireless services to customers.

Financial performance

CCI is a private company and therefore does not publically disclose financial information. However, IBISWorld estimates that CCI's revenue grew an annualized 4.6% to \$11.1 billion over the

five years to 2015. The company's revenue growth reflects increasing subscriber numbers and business from advertising. However, revenue generated from the transfer of basic subscribers to digital cable has been most notable. The company has also increased demand for its cable services by bundling them with its high-speed internet and voice services.

Cox Communications - financial performance*

Year	Revenue (\$ million)	(% change)	Operating Income (\$ million)	(% change)
2010	8,841.5	N/C	1,544.2	N/C
2011	9,090.6	2.8	1,608.9	4.2
2012	9,526.4	4.8	1,674.9	4.1
2013	9,900.0	3.9	1,743.6	4.1
2014	10,584.9	6.9	1,861.8	6.8
2015	11,073.2	4.6	1,951.1	4.8

*Estimates

SOURCE: IBISWORLD

Player Performance

Charter Communications Inc.
Market share: 8.4%

Missouri-based Charter Communications Inc. is focused in the Midwest. The company offers traditional cable TV services, high-speed internet, telephone and advanced video services, such as HDTV and video-on-demand, to 6.2 million residential and commercial customers. The company sells these services primarily on a subscription basis, often in a bundle of two or more services. About 62.0% of the company's customers subscribe to a bundle of services.

Following more than a year of vocal support for potential merger and acquisition activity, Charter and Time Warner Cable announced in May 2015 that a definitive agreement had been reached on a future merger. This announcement came a month after the massive Time Warner Cable merger with Comcast was called off due to concerns

over unlikely regulatory approval. Although Charter's merger with Time Warner Cable will still require regulatory approval, the deal is not expected to face similar antitrust concerns as Time Warner Cable's previous planned deal. Provided that the merger is approved, the companies are expected to collectively own the third-largest pay-TV service in the US, following Comcast and satellite TV provider DirecTV, which recently was acquired by AT&T. The deal is valued at \$78.7 billion and is currently unofficial.

Financial performance

In February 2013, Charter agreed to acquire Bresnan Broadband Holdings, known as Optimum West, from Cablevision for \$1.6 billion. Optimum West manages cable operating systems in Colorado, Montana, Wyoming and Utah.

Major Companies

Player Performance continued

In March 2015, the company announced an agreement to purchase Bright House Networks LLC, the sixth-largest cable operator in the United States. Additionally, following the failed merger of Comcast and Time Warner Cable,

Charter is expected to aggressively pursue TWC subscribers to provide services on a single distribution network. Over the five years to 2015, industry-relevant revenue is expected to increase an average 6.6% per year to \$9.7 billion.

Charter Communications, Inc. - financial performance*

Year	Revenue (\$ million)	(% change)	Operating Income (\$ million)	(% change)
2010	7,059.0	N/C	1,024.0	N/C
2011	7,204.0	2.1	1,041.0	1.7
2012	7,504.0	4.2	915.0	-12.1
2013	8,155.0	8.7	909.0	-0.7
2014	9,108.0	11.7	971.0	6.8
2015	9,713.0	6.6	961.0	-1.0

*Estimates

SOURCE: ANNUAL REPORT AND IBISWORLD

Player Performance

Cablevision Systems Corporation
Market share: 5.2%

Founded in 1973 as a cable TV operator, Cablevision offers television, phone and internet services to millions of households and businesses in the New York metropolitan area. Through Cablevision Lightpath Inc., the company's wholly owned subsidiary, it provides Ethernet-based data, internet,

voice and video transport and managed services, to the business market in the New York metropolitan area. The company operates in three reportable segments: cable, which consists of video, high-speed data, and VoIP services, Lightpath, and other. In June 2013, Bow Tie Cinema completed the acquisition of

Cablevision Systems Corporation - financial performance*

Year	Revenue (\$ million)	(% change)	Operating Income (\$ million)	(% change)
2010	4,994.4	N/C	1,415.6	N/C
2011	5,468.2	9.5	1,460.6	3.2
2012	5,479.1	0.2	1,017.0	-30.4
2013	5,576.0	1.8	952.5	-6.3
2014	5,784.9	3.7	1,064.1	11.7
2015	6,004.8	3.8	1,006.1	-5.5

*Estimates

SOURCE: ANNUAL REPORT AND IBISWORLD

Major Companies

Player Performance continued

Clearview Cinemas from Cablevision. In July of the same year, Charter Communications completed the acquisition of Cablevision's Bresnan Broadband Holdings, which operated cable systems in Montana, Wyoming, Colorado and Utah.

Financial performance

The company has about 2.7 million video customers in and around the New York area. The cable segment, which accounted

for about 90.0% of consolidated revenue in 2014, derives revenue principally through monthly charges to subscribers of video, high-speed data and VoIP services, which accounted for 53.0%, 22.0% and 14.0%, respectively, of consolidated revenue. Over the five years to 2015, industry-relevant revenue is expected to increase an average annual 3.8% to \$6.0 billion, partly due to rate increases caused by programming cost increases combined with a decrease in customers.

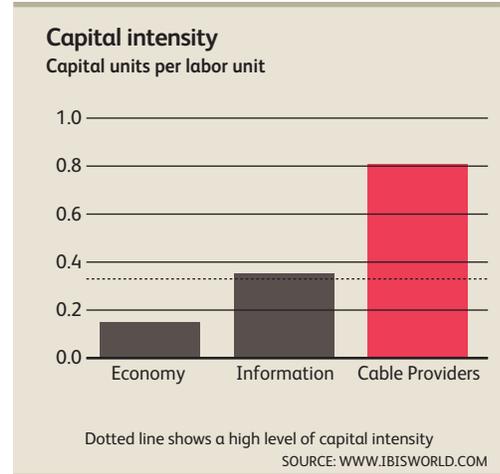
Operating Conditions

Capital Intensity | Technology & Systems | Revenue Volatility
 Regulation & Policy | Industry Assistance

Capital Intensity

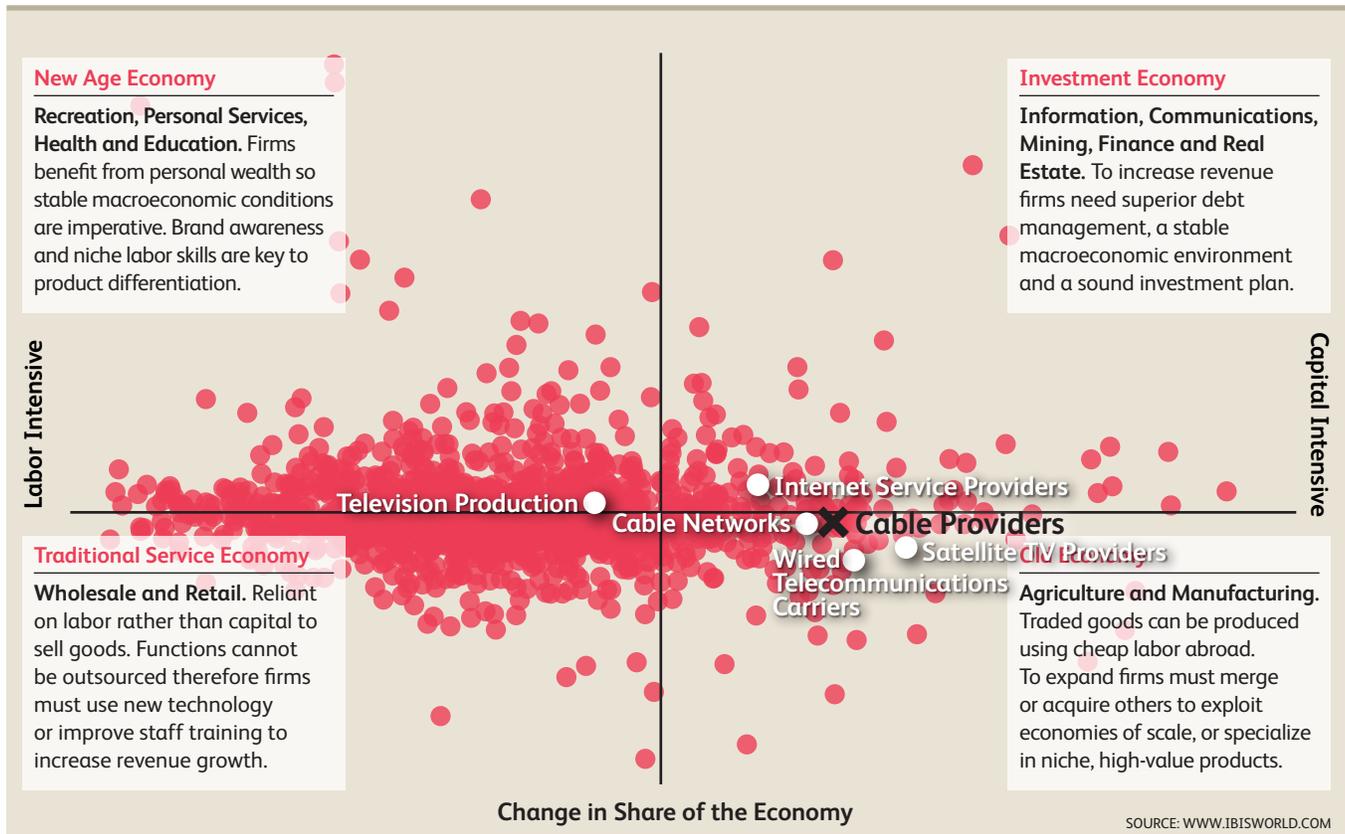
Level
 The level of capital intensity is **High**

The Cable Providers industry exhibits a high level of capital intensity. Using wages as a proxy for labor and depreciation as a proxy for capital, IBISWorld estimates that for every dollar spent on wages in the industry, \$0.80 is spent on capital. Companies in this industry must spend a significant amount of money on cable infrastructure and peripheral equipment as they constantly expand and upgrade their networks. New technologies to accommodate the rapid increase in data traffic over cable networks will continue to push industry operators to make infrastructure investments. Consequently, the capital intensity of



the industry is expected to remain high during the next five years.

Tools of the Trade: Growth Strategies for Success



Labor Intensive

Capital Intensive

Television Production ● Cable Networks ● **X Cable Providers** ● Internet Service Providers ● Satellite TV Providers ● Wired Telecommunications Carriers ●

Operating Conditions

Technology & Systems

Level
The level of
Technology
Change is **High**

The industry has a high level of technological change. Cable providers typically deliver video, data and voice services over the same infrastructure. Consequently, technological innovation in any of these fields affects the industry. For example, while the exponential increase in internet traffic during the past five years has been the major driver behind implementation of fiber-to-the-premises networks, fiber-optic networks have also changed the way cable providers operate and distribute programming. Fiber-optic TV delivers a high-quality picture, is unaffected by stormy weather and is the foundation behind internet-enabled televisions.

In the past five years, video-on-demand services, digital voice recorders (DVRs) and high-definition TV have cemented themselves as services that most consumers expect their cable provider to offer. As these services have become more prominent, companies have had to upgrade their systems to

provide more bandwidth and allow for two-way channel capability, which allows subscribers to communicate with a provider's programming facility. Companies in the industry have also invested in content delivery networks (CDNs). For cable providers, a CDN offers a way to deliver programming through their centralized core networks using internet protocol (IP) technology. By streaming programming in IP format, content can be delivered to any device with a broadband connection (i.e. tablet computers, smartphones). As internet access becomes more ubiquitous, cable providers are looking to provide customers with interactive content on all of their devices, not just TVs.

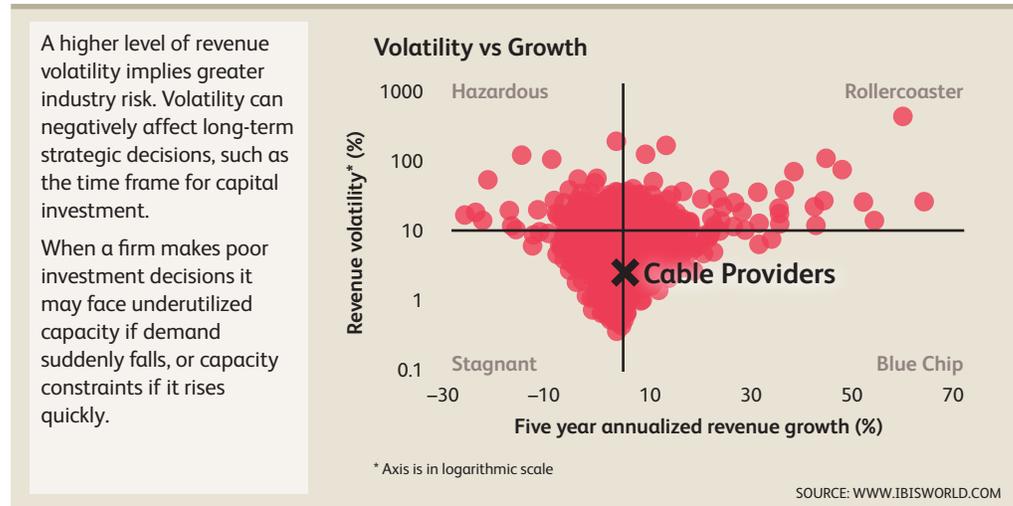
With the launch of the Wi-Fi Alliance, subscribers of all five major companies have access to the Wi-Fi networks of Comcast, Cablevision, Cox Communications, Bright House Networks and Time Warner Cable due to recent roaming agreements.

Revenue Volatility

Level
The level of
Volatility is **Low**

Over the five years to 2015, year-on-year revenue changes are expected to be low. As evidenced by the FCC's recent decision to regulate broadband internet service as a

public utility, the industry offers some services for which demand is inelastic. High-speed internet service thus provides a steady stream of revenue for cable



Operating Conditions

Revenue Volatility continued

providers. Slight fluctuations occur as voice and TV services, both of which are also offered by cable providers, have become less essential and face strong competition from mobile phones and online content providers. As budget-conscious consumers cut their spending,

they have been opting to disconnect their wired phone lines in favor of solely wireless services and cutting their cable in favor of streaming services such as Netflix and Amazon Prime. Declines in both have been mitigated by consumers who purchase bundled services to save money.

Regulation & Policy

Level & Trend
The level of Regulation is **Heavy** and the trend is **Increasing**

IBISWorld analysis indicates that this industry is subject to a heavy level of regulation. The industry is heavily regulated at the federal, state and local levels. The major regulator of this industry is the Federal Communications Commission (FCC).

Federal regulations

Federal regulations are designed to monitor industry ownership and control and restrain potential market dominance, which may otherwise lead to increasing cable prices as well as restrictions on content and program diversity. The FCC also monitors technological compliance, particularly in the areas of general availability of service to households, and noninterference with other telecommunications signals. The FCC's social responsibility charter requires operators to report on equal opportunity policies, measures and outcomes. Basic cable rates are also monitored by the FCC, though premium rates are not. This can lead to some cross-subsidization of basic cable rates by premium subscribers. Franchising authorities are required to ensure that access to cable service is not denied to any group of potential residential cable subscribers on the basis of income. In undertaking this role, these authorities may charge the cable operator a fee for the right to operate a cable system in that franchise area; however, the franchise fee paid by the cable system can be no more than five percent of its annual gross revenue.

The Cable Communication Act of 1984 established a national policy concerning cable communications and procedures that encourage the development of cable systems and assure that they respond to the interests of the local community, including diverse information sources and services. It established guidelines for authorities with respect to regulation, established an orderly process for renewal, and promoted competition by minimizing regulation. Congress stimulated competition and opened market competition with the 1992 and 1996 Cable Acts.

In February 2015, the FCC voted to reclassify high-speed internet as a telecommunications service, instead of an information service, under Title II of the Telecommunications Act, allowing it to regulate broadband internet service as a public utility. This ruling is expected to ensure that no content is blocked and that the internet is not divided into pay-to-play fast lanes and slow lanes.

State and local regulations

State and local regulations take a similar form as federal regulations. Some jurisdictions, such as Massachusetts, regulate cable TV on a comprehensive basis through a state commission or advisory board established for the sole purpose of cable TV regulation. In Alaska, Connecticut, Delaware, Nevada, New Jersey, Rhode Island, and Vermont, the agencies are state public utility commissions. In Hawaii, regulation of

Operating Conditions

Regulation & Policy continued

cable TV is the responsibility of the Department of Regulatory Agencies. In other areas of the United States, local governments, such as a city cable commission, city council, town council or a board of supervisors, regulate cable. These regulatory entities are called local franchising authorities. In addition, at least 30 other states have one or more laws specifically applicable to cable TV, that most commonly address subjects such as franchising, theft of service, pole attachments, rate regulation and taxation.

Under the Cable Act of 1992, local franchising authorities have the responsibility to regulate the rates for basic cable and equipment. The act requires that no new cable operator

may provide service without a franchise and establishes several policies relating to franchising requirements and fees. A local franchising authority may not grant an exclusive franchise and may not unreasonably withhold its consent for new service. Included in the grant of a franchise to a cable system are rights relating to the construction of the system, including the local franchising authority's authorization to use a public right-of-way. In addition, the law requires just compensation to property owners who have suffered damages because of a cable operator's construction, operation, installation or removal of its cable TV facilities.

Industry Assistance

Level & Trend
The level of
Industry Assistance
is **None** and the
trend is **Steady**

The industry does not receive any industry-specific government assistance. However, various trade associations represent the industry's interests to lawmakers and provide industry news and additional training. For example, the Telecommunications Industry Association is a trade association representing the global information and communications technology sector in the United States. It

supports this industry through standards development, policy initiatives, business opportunities, market intelligence and networking events. Similarly, the National Cable and Telecommunication Association represents more than 90.0% of cable providers in the United States, provides market intelligence and hosts an annual trade show to showcase innovation in the industry.

Key Statistics

Industry Data

	Revenue (\$m)	Industry Value Added (\$m)	Establishments	Enterprises	Employment	Exports	Imports	Wages (\$m)	Domestic Demand	Cable TV subscribers (Mils)
2006	74,630.0	37,356.0	14,405	1,335	336,556	--	--	15,857.7	N/A	98.0
2007	80,028.4	39,583.5	17,287	1,290	391,606	--	--	17,604.8	N/A	102.0
2008	85,687.9	39,785.5	13,936	1,195	326,724	--	--	17,194.4	N/A	104.1
2009	88,798.1	40,340.9	10,584	1,100	261,843	--	--	16,984.3	N/A	104.7
2010	94,204.2	43,764.0	10,286	1,009	233,412	--	--	17,419.4	N/A	104.5
2011	100,700.6	47,746.9	9,589	924	219,367	--	--	18,440.4	N/A	104.0
2012	106,519.6	48,257.9	8,238	873	187,510	--	--	18,842.6	N/A	103.2
2013	108,162.3	48,873.4	8,173	863	187,396	--	--	18,861.7	N/A	102.7
2014	113,332.4	50,373.1	8,081	849	188,903	--	--	19,088.3	N/A	101.7
2015	115,914.8	51,105.0	8,073	845	189,373	--	--	19,174.4	N/A	100.8
2016	119,890.2	52,384.3	7,965	830	189,336	--	--	19,236.7	N/A	99.8
2017	123,005.8	53,664.9	7,978	828	190,285	--	--	19,373.5	N/A	98.7
2018	126,222.5	54,987.8	7,865	813	190,144	--	--	19,411.2	N/A	97.9
2019	129,587.9	56,310.8	7,890	813	191,554	--	--	19,592.5	N/A	97.0
2020	133,080.5	57,445.9	7,794	800	191,872	--	--	19,674.6	N/A	96.1
Sector Rank	4/93	5/93	14/93	38/93	8/93	N/A	N/A	6/93	N/A	N/A
Economy Rank	93/1373	61/1373	451/1373	820/1373	236/1373	N/A	N/A	96/1373	N/A	N/A

Annual Change

	Revenue (%)	Industry Value Added (%)	Establishments (%)	Enterprises (%)	Employment (%)	Exports (%)	Imports (%)	Wages (%)	Domestic Demand (%)	Cable TV subscribers (%)
2007	7.2	6.0	20.0	-3.4	16.4	N/A	N/A	11.0	N/A	4.1
2008	7.1	0.5	-19.4	-7.4	-16.6	N/A	N/A	-2.3	N/A	2.1
2009	3.6	1.4	-24.1	-7.9	-19.9	N/A	N/A	-1.2	N/A	0.6
2010	6.1	8.5	-2.8	-8.3	-10.9	N/A	N/A	2.6	N/A	-0.2
2011	6.9	9.1	-6.8	-8.4	-6.0	N/A	N/A	5.9	N/A	-0.5
2012	5.8	1.1	-14.1	-5.5	-14.5	N/A	N/A	2.2	N/A	-0.8
2013	1.5	1.3	-0.8	-1.1	-0.1	N/A	N/A	0.1	N/A	-0.5
2014	4.8	3.1	-1.1	-1.6	0.8	N/A	N/A	1.2	N/A	-1.0
2015	2.3	1.5	-0.1	-0.5	0.2	N/A	N/A	0.5	N/A	-0.9
2016	3.4	2.5	-1.3	-1.8	0.0	N/A	N/A	0.3	N/A	-1.0
2017	2.6	2.4	0.2	-0.2	0.5	N/A	N/A	0.7	N/A	-1.1
2018	2.6	2.5	-1.4	-1.8	-0.1	N/A	N/A	0.2	N/A	-0.8
2019	2.7	2.4	0.3	0.0	0.7	N/A	N/A	0.9	N/A	-0.9
2020	2.7	2.0	-1.2	-1.6	0.2	N/A	N/A	0.4	N/A	-0.9
Sector Rank	61/93	68/93	70/93	70/93	74/93	N/A	N/A	73/93	N/A	N/A
Economy Rank	748/1373	877/1373	1006/1373	1027/1373	999/1373	N/A	N/A	946/1373	N/A	N/A

Key Ratios

	IVA/Revenue (%)	Imports/Demand (%)	Exports/Revenue (%)	Revenue per Employee (\$'000)	Wages/Revenue (%)	Employees per Est.	Average Wage (\$)	Share of the Economy (%)
2006	50.05	N/A	N/A	221.75	21.25	23.36	47,117.57	0.26
2007	49.46	N/A	N/A	204.36	22.00	22.65	44,955.39	0.27
2008	46.43	N/A	N/A	262.26	20.07	23.44	52,626.68	0.27
2009	45.43	N/A	N/A	339.13	19.13	24.74	64,864.44	0.28
2010	46.46	N/A	N/A	403.60	18.49	22.69	74,629.41	0.30
2011	47.41	N/A	N/A	459.05	18.31	22.88	84,061.87	0.32
2012	45.30	N/A	N/A	568.07	17.69	22.76	100,488.51	0.31
2013	45.19	N/A	N/A	577.19	17.44	22.93	100,651.56	0.31
2014	44.45	N/A	N/A	599.95	16.84	23.38	101,048.16	0.32
2015	44.09	N/A	N/A	612.10	16.54	23.46	101,252.03	0.31
2016	43.69	N/A	N/A	633.21	16.05	23.77	101,600.86	0.31
2017	43.63	N/A	N/A	646.43	15.75	23.85	101,813.07	0.31
2018	43.56	N/A	N/A	663.83	15.38	24.18	102,086.84	0.31
2019	43.45	N/A	N/A	676.51	15.12	24.28	102,281.86	0.31
2020	43.17	N/A	N/A	693.59	14.78	24.62	102,540.24	0.31
Sector Rank	40/93	N/A	N/A	17/93	72/93	37/93	27/93	5/93
Economy Rank	389/1373	N/A	N/A	265/1373	775/1373	489/1373	91/1373	61/1373

Figures are in inflation-adjusted 2015 dollars. Rank refers to 2015 data.

SOURCE: WWW.IBISWORLD.COM

Jargon & Glossary

Industry Jargon

BASIC CABLE The minimum package of cable channels, which includes all free-to-air TV channels and a select few cable channels.

BUNDLED SERVICES Bundled services include internet access and VoIP telephone service sold in combination with a cable TV subscription.

CUSTOMER CHURN The rate of increase at which customers discontinue their service on a voluntary or involuntary basis.

HIGH-DEFINITION (HD) A picture with a resolution more detailed than a traditional standard definition television.

IBISWorld Glossary

BARRIERS TO ENTRY High barriers to entry mean that new companies struggle to enter an industry, while low barriers mean it is easy for new companies to enter an industry.

CAPITAL INTENSITY Compares the amount of money spent on capital (plant, machinery and equipment) with that spent on labor. IBISWorld uses the ratio of depreciation to wages as a proxy for capital intensity. High capital intensity is more than \$0.333 of capital to \$1 of labor; medium is \$0.125 to \$0.333 of capital to \$1 of labor; low is less than \$0.125 of capital for every \$1 of labor.

CONSTANT PRICES The dollar figures in the Key Statistics table, including forecasts, are adjusted for inflation using the current year (i.e. year published) as the base year. This removes the impact of changes in the purchasing power of the dollar, leaving only the "real" growth or decline in industry metrics. The inflation adjustments in IBISWorld's reports are made using the US Bureau of Economic Analysis' implicit GDP price deflator.

DOMESTIC DEMAND Spending on industry goods and services within the United States, regardless of their country of origin. It is derived by adding imports to industry revenue, and then subtracting exports.

EMPLOYMENT The number of permanent, part-time, temporary and seasonal employees, working proprietors, partners, managers and executives within the industry.

ENTERPRISE A division that is separately managed and keeps management accounts. Each enterprise consists of one or more establishments that are under common ownership or control.

ESTABLISHMENT The smallest type of accounting unit within an enterprise, an establishment is a single physical location where business is conducted or where services or industrial operations are performed. Multiple establishments under common control make up an enterprise.

EXPORTS Total value of industry goods and services sold by US companies to customers abroad.

IMPORTS Total value of industry goods and services brought in from foreign countries to be sold in the United States.

INDUSTRY CONCENTRATION An indicator of the dominance of the top four players in an industry. Concentration is considered high if the top players account for more than 70% of industry revenue. Medium is 40% to 70% of industry revenue. Low is less than 40%.

INDUSTRY REVENUE The total sales of industry goods and services (exclusive of excise and sales tax); subsidies on production; all other operating income from outside the firm (such as commission income, repair and service income, and rent, leasing and hiring income); and capital work done by rental or lease. Receipts from interest royalties, dividends and the sale of fixed tangible assets are excluded.

INDUSTRY VALUE ADDED (IVA) The market value of goods and services produced by the industry minus the cost of goods and services used in production. IVA is also described as the industry's contribution to GDP, or profit plus wages and depreciation.

INTERNATIONAL TRADE The level of international trade is determined by ratios of exports to revenue and imports to domestic demand. For exports/revenue: low is less than 5%, medium is 5% to 20%, and high is more than 20%. Imports/domestic demand: low is less than 5%, medium is 5% to 35%, and high is more than 35%.

LIFE CYCLE All industries go through periods of growth, maturity and decline. IBISWorld determines an industry's life cycle by considering its growth rate (measured by IVA) compared with GDP; the growth rate of the number of establishments; the amount of change the industry's products are undergoing; the rate of technological change; and the level of customer acceptance of industry products and services.

NONEMPLOYING ESTABLISHMENT Businesses with no paid employment or payroll, also known as nonemployers. These are mostly set up by self-employed individuals.

PROFIT IBISWorld uses earnings before interest and tax (EBIT) as an indicator of a company's profitability. It is calculated as revenue minus expenses, excluding interest and tax.

VOLATILITY The level of volatility is determined by averaging the absolute change in revenue in each of the past five years. Volatility levels: very high is more than $\pm 20\%$; high volatility is $\pm 10\%$ to $\pm 20\%$; moderate volatility is $\pm 3\%$ to $\pm 10\%$; and low volatility is less than $\pm 3\%$.

WAGES The gross total wages and salaries of all employees in the industry. The cost of benefits is also included in this figure.

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