

## Media and Telecommunications Industry Report

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### Overview of the Industry

The Technology, Media, and Telecom Industry, commonly referred to as the TMT Industry, is a multifaceted industry comprised of networks, wireless communications, entertainment media and content generation, and other consumer technologies. Key sub-industries in this broad sector include cloud, IoT, FinTech, Digital Media, and Information Technology. The market cap for the media industry specifically is expected to be around \$2.2 trillion globally, while total spending on global telecommunications services will reach around \$1.717 trillion.

The media industry has three major sectors: entertainment distribution, content production, and video streaming services. The top 5 key players in the media industry are AT&T, The Walt Disney Corporation, Comcast Corporation, Charter Communications, and Twenty-First Century Fox Inc. The telecommunications industry has three major sectors as well: equipment, services, and wireless communications. Key players for the telecommunications sectors are China Mobile, Verizon, AT&T, Nippon Telegraph and SoftBank, and Vodafone Group Plc.

Key developments that are shaping the future of the telecommunications industry include the advent of 5G networks, integration of AI in telecom, television, and smart speakers. Industry trends in the media sector include a dramatic increase in mobile and streaming video and less demand for traditional pay TV. One of the biggest trends that have affected the TMT industry as a whole is the recent merging and consolidation of media and telecom companies. These trends have resulted in immense TMT industry growth over the past year itself, such as with IT equipment and communications equipment. Important valuation metrics to note when assessing companies in the industry include P/E ratios, churn rates, and average revenue per user.

The TMT industry is rapidly changing as new technologies and cross-company mergers arise. Future outlook of this industry will be driven by a focus on creating business efficiencies and streamlining processes, monetization of investments in new technologies, a focus on security and privacy, and regulations pertaining to net neutrality. Growth opportunities will be affected by changing market conditions and consumer preferences, consolidations and partnerships, cable companies augmenting pay-TV businesses with communications services, 5G, mobile health and mobile payments services.

## Key Statistics

The media industry is an enormous industry that is only expected to keep on growing as technology changes the way people consume entertainment. In 2020, the market cap for the US entertainment and media industry is forecasted to be worth \$720 billion, and the global market cap is expected to be worth \$2.2 trillion. The media landscape comprises of companies that distribute, produce, and stream entertainment. AT&T/Time Warner has the largest market cap (\$197 billion) in this industry with Verizon following closely at \$195 billion.

The telecommunications industry is dominated by similar players in the media industry (AT&T, Verizon), but there is also room for other major players, such as Huawei and China Mobile, that do not directly involve media. In 2017, the total service revenues of the US mobile wireless industry was \$179 billion. In 2022, global telecommunication services spending is expected to reach \$1.717 trillion. Spending on wireless telecommunication services, however, is predicted to take up a majority of the spending on telecommunication services. Wireless telecommunication services spending is expected to reach \$917 billion in 2020, while spending on fixed telecommunication services is expected to reach \$525 billion. Capital expenditure in the mobile industry is predicted to reach \$158 billion globally.

## Major Sectors

The media and telecommunications industry consists of various sectors. For the media industry, the major sectors are distribution of entertainment, content producers, and video streamers. Distribution deals with the delivery of entertainment to consumers. The major companies in this sector are AT&T, Verizon, and Comcast. Content producers involve companies that create original content that is then distributed through the companies mentioned above. Content producing companies include Disney, 21st Century Fox, and Sony Pictures. Finally, companies, such as Netflix and Hulu, that stream media over the Internet are achieving a greater presence in the industry as online streaming becomes more and more popular among consumers.

The telecommunications industry can be divided up into three sectors: equipment, services, and wireless communications. The telecommunication equipment sector consists of companies that produce hardware that is used for telecommunications, such as transmission lines and radios. Prominent companies in this sector are Huawei, Cisco Systems, and Fujitsu. Companies in the telecommunication services sector provide fixed-network or mobile services. The main players in this sector are AT&T, Verizon, and China Mobile. The last sector, wireless communications, deals with providing communications through waves or other sources of energy. Major American companies in this sector are AT&T, Verizon, and T-Mobile.

## Industry Developments and Trends

The media and telecommunications industry is consistently being affected by technological advancements and changing consumer trends, which has allowed the industry to change in many unique ways.

One important advancement in the telecommunications industry is with the advent and improvements with 5G technology. The 5G mobile network boasts high data speeds and low latency has the potential to completely change areas such as mobility, healthcare, manufacturing, and almost any industry where constant connectivity is important. 5G implementations have already played a major role in smartphones, modems/hotspots, and FWA devices. Artificial intelligence and machine learning will also transform this sector in unique ways. This technology is quickly transitioning from the hands of experts to any company that wishes to improve their business and operations. The telecommunications industry is no exception, and AI could help telecommunications companies implement network optimization, predictive maintenance, virtual assistants, and robotic process automation. Smart speakers are an interesting development and have become one of the fastest-adopted new devices in history. Smart speakers are consistently improving in recognition accuracy. They are an additional and easier way to access computing power, especially for those with visual difficulties.

In the media sector, the major trend is the large increase in demand for streaming of TV/videos along with the decreased demand for traditional pay television. Over \$2 billion is being spent each month for subscription video services in the US. This has led to consolidation among companies in the telecommunications and media sectors. In 2018 alone, these telecom and media mergers were worth over \$300 billion.

## Industry Performance

Industry market performance has been very strong for the TMT industry, especially when looking at growth over the past year. The communications industry has seen a 1.75% growth over the past year, the information technology has seen a 5.2% growth over the past year, and communications equipment has seen a 16.42% growth over the year.

Another metric that can be used to evaluate performance of the TMT industry is the measure of M&A activity in the industry. M&A activity amongst firms indicate accelerated product roadmaps, technological advancements, and protection against competition in the industry. According to EY reports, TMT dealmaking intentions are around 56%. 73% percent of executives in the Media and Entertainment sector expect growth from existing operations and 59% of Telecom executives expect to actively pursue M&A.

## Valuation

The technology, media and telecom (TMT) sector has a P/E ratio of 18.45, which is significantly lower than the market average of 36.90. The sector also has a considerably lower EV/EBITA multiple of 7.83 compared to the market average of 15.66. TMT sector has a current ratio of 0.91, compared to the average of 1.82. With a slightly less than one current ratio, most TMT companies are running with current liabilities that slightly exceed current assets. This puts TMT sector on a mildly risky position, however it also suggests most TMT companies are running with high efficiency. TMT's low WACC of 8.42 compared to the market average of 16.84 further suggest the sector's strong value generating capabilities.

Churn rate is an industry specific metric for TMT that shows the rate at which customers leave for a competitor. Due to fierce competition, the wireless telecom sector suffers from a high churn rate of 37.32% while the media/entertainment sector has a churn rate of 3.85%. Average revenue per user (ARPU) is another metric used for screening a telecom company's performance growth by measuring its subscriber base. The wireless telecom has an ARPU of \$43.65.

## Future Outlook

Overall, the telecommunication industry has a prospective future outlook. First, telecommunication companies are suggested to continue to focus on creating business efficiencies and streamlining processes, such as adding more IoT devices to various networks. However, by doing so, they will also face the challenge of heavy workload that most their billing systems are not capable of supporting today.

Telecommunication companies can also monetize investments in new technologies in the future. As the trend in all industries is constantly changing, the business model and revenue model of new technologies could be entirely new. With the emergent trend of 5G and virtual reality, telecommunication companies can improve their customer experience as they monetize their investments.

Another future focus for telecommunication companies is security and privacy. An ongoing concern for all telecommunication companies is the growing anxiety of consumers about the sharing and storage of their personal data by third parties. Consumers are more cautious and protective of their privacy. To gain the trust of customers, telecommunication companies could give customers visibility and control of personal data in exchange for personalized services and advertising.

One last issue telecommunication companies should pay close attention to in the future is regulations pertaining to "net neutrality." As some states have passed laws that challenge the US Federal Communication Commission's December 2017 repeal of net neutrality rules that prohibited broadband providers from blocking websites or charging for higher-quality service or content, net neutrality story will undoubtedly continue to develop over the coming year.

There are many recent trends that will significantly change the media industry as well. The major drivers of change within this industry are the growth in popularity of streaming services and a shift from traditional pay TV. According to the "2019 Media & Entertainment Industry Outlook Report" by Deloitte Consulting LLP, "Nearly half of all pay-TV subscribers report dissatisfaction with their service,

and 70 percent feel they get too little value for their money.” With so many consumers subscribing to so many streaming services, firms will have to deal with this new “consumer subscription fatigue” problem. Media companies have also been changing their content generation strategies, exploring areas such as augmented and virtual reality.

## **Growth Opportunities**

As technology has advanced, the biggest growth opportunity for telecommunication companies is in the changing market conditions and consumer preferences. As consumers have shown increasing preferences in data-heavy applications in their daily lives, consumers demand higher data limits. Such trends are expected to continue, so telecommunication companies should opt in for unlimited data plans. 5G is a significant business opportunity for telecommunication companies as well. 5G will help them gain revenue in the fixed broadband market and business-to-business opportunities such as smart cities and Internet of Things. 5G also provides the ideal environment for telecommunications providers to employ “network slicing” to customize their offerings. This enables the sharing of a given physical network to run IoT, mobile broadband, and very low-latency applications, including many connected-car and connected-home functions.

For cable companies, they should build consolidations and partnerships, especially in the area of content. As a high number of consumers prefers video streaming services over cable subscriptions, cable companies are encouraged to augment their pay-TV business with communications services. Potential opportunities are extending their programming distributions beyond fixed lines and consider M&A deals to integrate content and media into their offerings.

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