

REVISIONS TO THE GLOBAL INDUSTRY CLASSIFICATION STANDARD (GICS®) STRUCTURE IN 2018

BY S&P DOW JONES INDICES AND MSCI INC.

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CHANGES TO THE GICS STRUCTURE IN 2018

NEW YORK, NOVEMBER 15, 2017 - S&P Dow Jones Indices, a leading provider of financial market indices, and MSCI Inc., a leading provider of research-based indexes and analytics, have conducted their annual review of the Global Industry Classification Standard (GICS®) structure. The following provides a detailed summary of the changes that will be made as a result of the consultation.

The last several years have seen an evolution in the way we communicate and access entertainment content and other information. This evolution is a result of integration between telecommunications, media, and internet companies. Companies have further moved in this direction by consolidating through mergers and acquisitions and many now offer bundled services such as cable, internet services, and telephone services. Some of these companies also create interactive entertainment content and aggregate information that is delivered through multiple platforms such as cable and internet, as well as accessed on cellular phones.

Market views concerning the proposal of the Telecommunication Services Sector were generally favorable and as a result, S&P Dow Jones Indices and MSCI have decided to broaden and rename the Telecommunication Services Sector as Communication Services, effective in 2018 to include companies that facilitate communication and offer related content and information through various media. The renamed Sector will include the existing telecommunication companies, as well as companies selected from the Consumer Discretionary Sector currently classified under Media Industry Group and Internet & Direct Marketing Retail Sub-Industry along with certain companies currently classified in the Information Technology Sector. This is a step towards acknowledging the convergence of telecommunications, media, and select internet companies and the overlapping services rendered by these companies, within the GICS Structure.

Communication Services Sector

Market feedback concerning the proposal of the Telecommunication Services Sector was generally favorable citing the integration of telecom, media and select internet companies in terms of both infrastructure and content that has led to a complete transformation in the way we communicate and seek information today. There is an evident convergence between telecom and cable companies. In addition, there are internet companies that have become synonymous with social communication and information. Therefore, S&P Dow Jones Indices and MSCI have decided to acknowledge this convergence by broadening and renaming the Telecommunication Services Sector as Communication Services to include companies that facilitate communication and offer related content and information through various mediums. In addition, moving Home Entertainment Software including gaming companies to the Communication Services Sector under Media & Entertainment Industry Group was seen as a logical step under GICS because these companies create interactive entertainment products such as games that can be played on multiple platforms such as websites, on phones, or through consoles.

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Summary of changes:

The Telecommunication Services Sector is being renamed to Communication Services and will contain two Industry Groups: Telecommunication Services and Media & Entertainment.

- The Telecommunication Services Industry Group will remain under the Communication Services Sector with the existing two Industries: Diversified Telecommunication Services and Wireless Telecommunication Services.
 - The Diversified Telecommunication Services Industry will continue to have two Sub-Industries: Alternative Carriers and Integrated Telecommunication Services.
 - The Integrated Telecommunication Services Sub-Industry will be expanded to include internet service providers offering internet access to end users.
 - The Wireless Telecommunication Services Industry will continue to have one Sub-Industry: Wireless Telecommunication Services.
- The Media Industry Group will move out of Consumer Discretionary and into the Communication Services Sector, and will be renamed Media & Entertainment. It will remain an Industry Group and will contain three Industries: Media, Entertainment, and Interactive Media & Services.
 - The Media Industry will contain four existing Sub-Industries: Advertising, Broadcasting, Cable & Satellite, and Publishing.
 - The Entertainment Industry will contain two Sub-Industries: Movies & Entertainment and Interactive Home Entertainment.
 - The Movies & Entertainment Sub-Industry will now include online entertainment streaming companies in addition to companies currently classified in the Movies & Entertainment Sub-Industry.
 - The Interactive Home Entertainment Sub-Industry will be comprised of companies from the current Home Entertainment Software Sub-Industry in the Information Technology Sector, as well as producers of mobile gaming applications.
 - The Interactive Media & Services Industry and Sub-Industry will include companies engaged in content and information creation or distribution through proprietary platforms, where revenues are derived primarily through pay-per-click advertisements. It will include search engines, social media and networking platforms, online classifieds, and online review companies.

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Sector	Industry Group	Industry	Sub-Industry
50 – Communication Services (Name change)	5010 – Telecommunication Services	501010 – Diversified Telecommunication Services	50101010 – Alternative Carriers* 50101020 – Integrated Telecommunication Services (Definition update)
		501020 – Wireless Telecommunication Services	50102010 – Wireless Telecommunication Services (Definition update)
	5020 – Media & Entertainment (New Industry Group & code)	502010 – Media (New Industry & code)	50201010 – Advertising* (New code)
			50201020 – Broadcasting* (New code)
			50201030 – Cable & Satellite* (New code)
			50201040 – Publishing (New code & definition update)
		502020 – Entertainment (New Industry & code)	50202010 - Movies & Entertainment (New code and definition update)
			50202020 – Interactive Home Entertainment (New Sub- Industry & code)
		502030 – Interactive Media & Services (New Industry & code)	50203010 – Interactive Media & Services (New Sub- Industry & code)

^{*}No change in definition

Definitions for Sub-Industries:

Integrated Telecommunication Services: Operators of primarily fixed-line telecommunications networks and companies providing both wireless and fixed-line telecommunications services not classified elsewhere. Also includes Internet Service Providers offering internet access to end users.

Wireless Telecommunication Services: Providers of primarily cellular or wireless telecommunication services.

Publishing: Publishers of newspapers, magazines, and books in print or electronic formats.

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Movies & Entertainment: Companies that engage in producing and selling entertainment products and services, including companies engaged in the production, distribution and screening of movies and television shows, producers and distributors of music, entertainment theaters and sports teams. Also includes companies offering and/or producing entertainment content streamed online.

Interactive Home Entertainment: Producers of interactive gaming products, including mobile gaming applications. Also includes educational software used primarily in the home. Excludes online gambling companies classified in the Casinos & Gaming Sub-Industry.

Interactive Media & Services: Companies engaging in content and information creation or distribution through proprietary platforms, where revenues are derived primarily through payper-click advertisements. Includes search engines, social media and networking platforms, online classifieds, and online review companies. Excludes companies operating online marketplaces classified in Internet & Direct Marketing Retail.

<u>Internet & Direct Marketing Retail Sub-Industry under the Consumer Discretionary Sector</u>

Feedback was received that internet companies that operate online marketplaces with or without inventory, in general, are competing with one another for the same consumers and therefore e-commerce companies should be classified as Internet Retail within the Consumer Discretionary Sector instead of Information Technology.

Summary of change and updated definition:

The Internet & Direct Marketing Retail Sub-Industry will be updated to include all online marketplaces for consumer products and services. The Sub-Industry will include e-commerce companies regardless of whether they hold inventory.

Internet & Direct Marketing Retail: Companies providing retail services primarily on the internet, through mail order, and TV home shopping retailers. Also includes companies providing online marketplaces for consumer products and services.

Information Technology Sector

Market feedback was in agreement that the Internet Software & Services Sub-Industry has become too large and diverse to be useful for analysis or index construction. It has evolved to include new business models using internet technology to cater to a variety of end users and industries. A majority of respondents now regard the internet as simply a medium for delivery of a company's products & services.

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Summary of changes:

- As a result of the reclassification of select companies engaging in content and information creation or distribution through proprietary platforms, where revenues are derived primarily through pay-per-click advertisements and online marketplaces for consumer products and services to Communication Services and Consumer Discretionary Sector respectively, the remaining companies in the Internet Software & Services Sub-Industry such as data centers, cloud networking, storage infrastructure, and web hosting services will be moved to a new Sub-Industry called Internet Services & Infrastructure under the IT Services Industry.
 - The existing Internet Software & Services Industry and Sub-Industry will be discontinued.
 - A new Sub-Industry will be created under the IT Services Industry called Internet Services & Infrastructure. This Sub-Industry will include companies providing services and infrastructure for the internet industry including data centers, cloud networking and storage infrastructure, and web hosting services.
 - In addition, the Application Software Sub-Industry will include cloud-based software companies.
 - Apart from what is outlined above, there are no changes to the Information Technology Sector.

Sector	Industry Group	Industry	Sub-Industry Sub-Industry
45 – Information Technology	4510 – Software & Services	451010 - Internet Software & Services (Discontinued)	45101010 - Internet Software & Services (Discontinued)
		451020 – IT Services	45102010 – IT Consulting & Other Services* 45102020 – Data Processing & Outsourced Services* 45102030 – Internet Services & Infrastructure (new Sub-Industry & code)
		451030 – Software	45103010 – Application Software (Definition update) 45103020 – Systems Software*

^{*}No change in definition

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Definitions for Sub-Industries:

Internet Services & Infrastructure: Companies providing services and infrastructure for the internet industry including data centers and cloud networking and storage infrastructure. Also includes companies providing web hosting services. Excludes companies classified in the Software Industry.

Application Software: Companies engaged in developing and producing software designed for specialized applications for the business or consumer market. Includes enterprise and technical software, as well as cloud-based software. Excludes companies classified in the Interactive Home Entertainment Sub-Industry. Also excludes companies producing systems or database management software classified in the Systems Software Sub-Industry.

Additional Sub-Industry Definition Updates

As previously announced, the following definitions have been updated.

10102040 - Oil & Gas Storage & Transportation: Companies engaged in the storage and/or transportation of oil, gas, and/or refined products. Includes diversified midstream natural gas companies, oil and refined product pipelines, coal slurry pipelines and oil & gas shipping companies.

55102010 - Gas Utilities: Companies whose main charter is to distribute and transmit natural and manufactured gas. Excludes companies primarily involved in gas exploration or production classified in the Oil & Gas Exploration & Production Sub-Industry. Also excludes companies engaged in the storage and/or transportation of oil, gas, and/or refined products classified in the Oil & Gas Storage & Transportation Sub-Industry.

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Summary of 2018 GICS Structure Changes:

SECTOR LEVEL	SECTOR LEVEL						
Type of change	Code	Current Sector Name	New Sector Name				
Name Change	50	Telecommunication Services	Communication Services				
INDUSTRY GROUP LEVEL							
Type of change	Code	Current Industry Group Name	New Industry Group Name				
Discontinued	2540	Media					
New	5020		Media & Entertainment				
INDUSTRY LEVEL							
Type of change	Code	Current Industry Name	New Industry Name				
Discontinued	254010	Media					
Discontinued	451010	Internet Software & Services					
New	502010		Media				
New	502020		Entertainment				
New	502030		Interactive Media & Services				
SUB-INDUSTRY LEVEL							
Type of change	Code	Current Sub-Industry Name	New Sub-Industry Name				
Discontinued	25401010	Advertising					
Discontinued	25401020	Broadcasting					
Discontinued	25401025	Cable & Satellite					
Discontinued	25401030	Movies & Entertainment					
Discontinued	25401040	Publishing					
Discontinued	45101010	Internet Software & Services					
Discontinued	45103030	Home Entertainment Software					
New	45102030		Internet Services & Infrastructure				
New	50201010		Advertising				
New	50201020		Broadcasting				
New	50201030		Cable & Satellite				
New	50201040		Publishing				
New	50202010		Movies & Entertainment				
New	50202020		Interactive Home Entertainment				
New	50203010		Interactive Media & Services				
Definition Change	10102040	Oil & Gas Storage & Transportation					
Definition Change	25502020	Internet & Direct Marketing Retail					
Definition Change	45103010	Application Software					
Definition Change	50101020	Integrated Telecommunication Services					
Definition Change	50102010	Wireless Telecommunication Services					
Definition Change	55102010	Gas Utilities					

The new GICS structure will consist of 11 Sectors, 24 Industry Groups, 69 Industries and 158 Sub-Industries.

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<u>IMPLEMENTATION TIMELINE AND LIST OF IMPACTED COMPANIES:</u>

The changes to the GICS structure will be implemented in GICS Direct after the close of business (ET) on Friday, September 28, 2018.

A select list of large market capitalization companies affected by the changes will be announced in January, 2018.

The full list of securities affected by these changes will be made available to GICS Direct clients no later than August 1, 2018.

S&P Dow Jones Indices and MSCI will each consult with clients regarding implementation into their respective indexes.

For more information regarding the GICS structure, please visit S&P Dow Jones Indices' web site at www.spdji.com and MSCI's web site at www.msci.com.

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