
The Effects of Technological and Organizational Changes on Employment and Labor-Management Relations in the Electronic Media Industry

By:

Maria Figueroa, Director of Labor and Industry Research, Cornell ILR

Lois Gray, Professor Emeritus, Cornell ILR

with assistance from Daniel Cerio, Researcher, Cornell ILR

Sloan Industry Studies Annual Conference

May 2008

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- This paper focuses on the rapid technological and organizational changes that reconfigured the electronic media industry over the last ten years and their impact on labor management relations.
 - Research questions:
 - What are the effects of technological and organizational changes on markets, business strategies, employment levels and skill requirements?
 - What are the implications for labor-management relations and the distribution of any additional revenue stream generated by the new technologies?
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Key Findings

- ❑ The new technologies have expanded the industry's market through new distribution platforms, creating additional revenue streams, increasing employment and changing the occupational mix.
 - ❑ The expanding market creates incentives for continuing reorganization of ownership and development of new business strategies.
 - ❑ The effect of these changes has been an intensification of the labor-management conflicts over the distribution of the new revenue streams, as illustrated in the recent strike by the Writers' Guilds.
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Basic Industry Facts

- ❑ Comprising film, broadcasting and sound recording, the electronic media industry generated about 780 thousand jobs in 2006, more than the aerospace, which generated 487 thousand in the same year. Electronic media is also one of the leading sources of U.S. export revenues.
 - ❑ This is a fast growing industry, with employment in the film and video sector alone projected to grow 17 percent from 2004 to 2017.
 - ❑ As a whole, the industry is highly unionized compared to other private sector industries, but its collective bargaining structure is fragmented, with multiple unions representing employees by occupation and negotiating separately with employers, including large media conglomerates.
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Technological Changes

- The most significant changes of the last 10 years, which have been largely induced by digitization, include:
 - Internet distribution
 - Multimedia convergence: TV, computers, phones and other portable devices
 - Continued introduction of labor saving technologies
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Organizational Changes

- ❑ The organizational changes undergone by businesses in this industry have been largely driven by technological change and globalization, and partly by changes in the regulatory environment.
 - ❑ Consolidation in the industry continues, but it takes different forms as the dominant industry conglomerates have redirected their consolidation strategies, shifting from diversification and horizontal integration to targeted expansion into the new technologies.
 - ❑ Thus, companies in the so called Traditional Media sectors are quickly embracing the new technologies through acquisitions or alliances/partnerships with new media start-ups. (See below table.)
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Organizational Changes

Conglomerate Operations by Segment										
Company	Traditional Media							New Media		
	Film Prod. & Library	TV Prod.	TV Stations & Networks	Cable Networks	Cable/Satellite System	Radio Stations/ Networks	Recorded Music	Video Games (dist., platforms &/or hardware)	Internet Content Prod./Dist., & Internet Radio & TV	Portable Devices Content Dist. (phones & iPod)
Disney	X	X	X	X		X	X	X	X	X
NBC Universal	X	X	X	X			X	X	X	
News Corp	X	X	X	X	X				X	X
Time Warner	X	X	X	X	X		X	X	X	
Viacom	X	X	X	X				X	X	
CBS Corp		X	X	X	X	X	X	X	X	
Sony Corp	X	X					X	X		
Clear Channel			X			X			X	

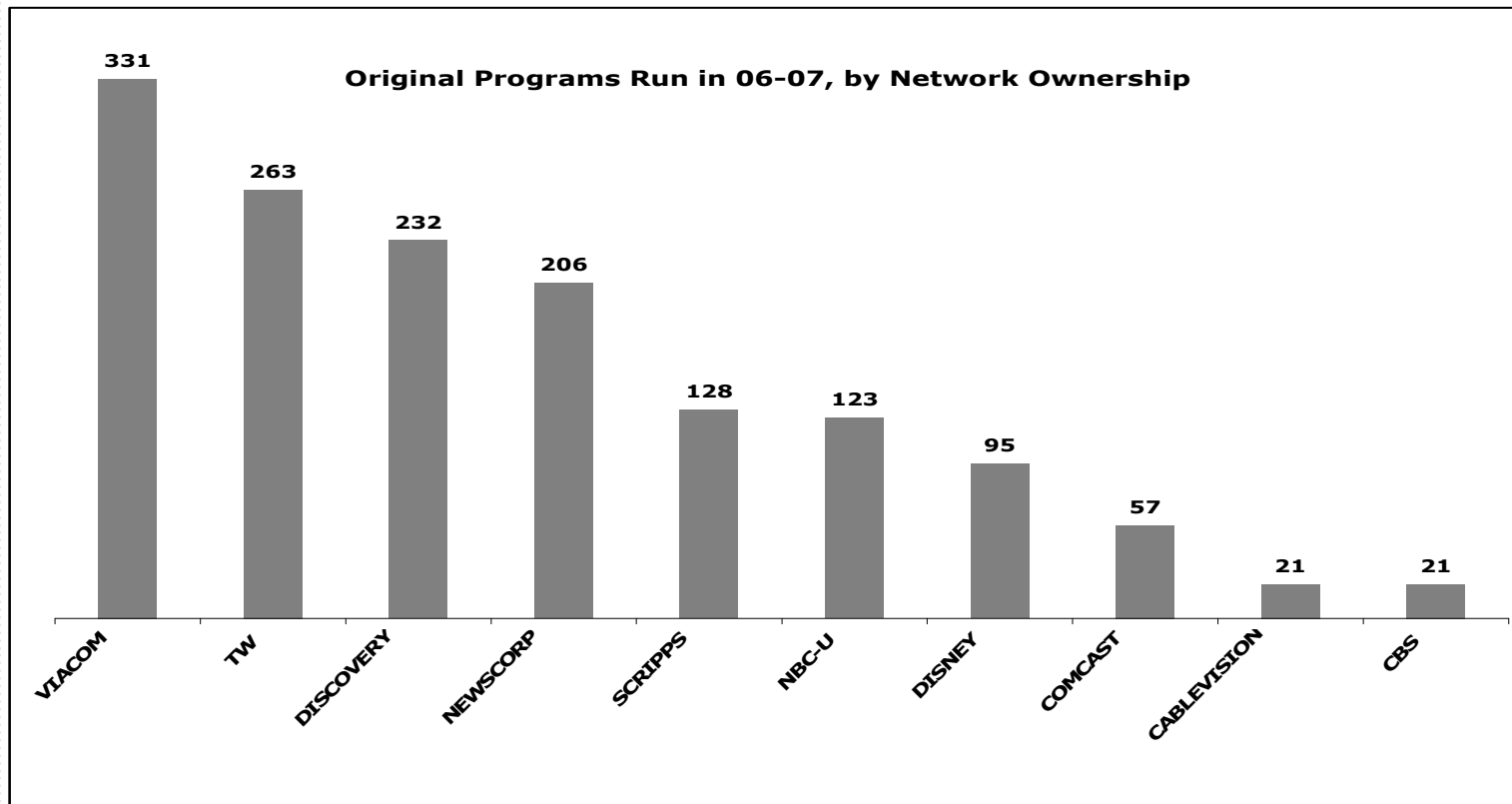
Source: Company SEC Filings.

Organizational Changes and Business Strategies

- ❑ In **Motion Pictures**, the major studios are collaborating to address challenges (particularly piracy), seize opportunities in the new technologies, and avoid the type of devastation experienced by the Music Business for losing control over the distribution end of the business. The studios have formed a joint venture to deliver video on demand over the Internet and a consortium to oversee the process of setting digital standards.
 - ❑ **Broadcast TV and Cable:** the ability to offer packages through multi-media platforms to advertisers has improved advertising revenues of the companies in this segment.
 - ❑ All the TV and cable network companies are offering content on the internet and partnering with third-party sites to stream their shows.
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Industry Structure: Cable

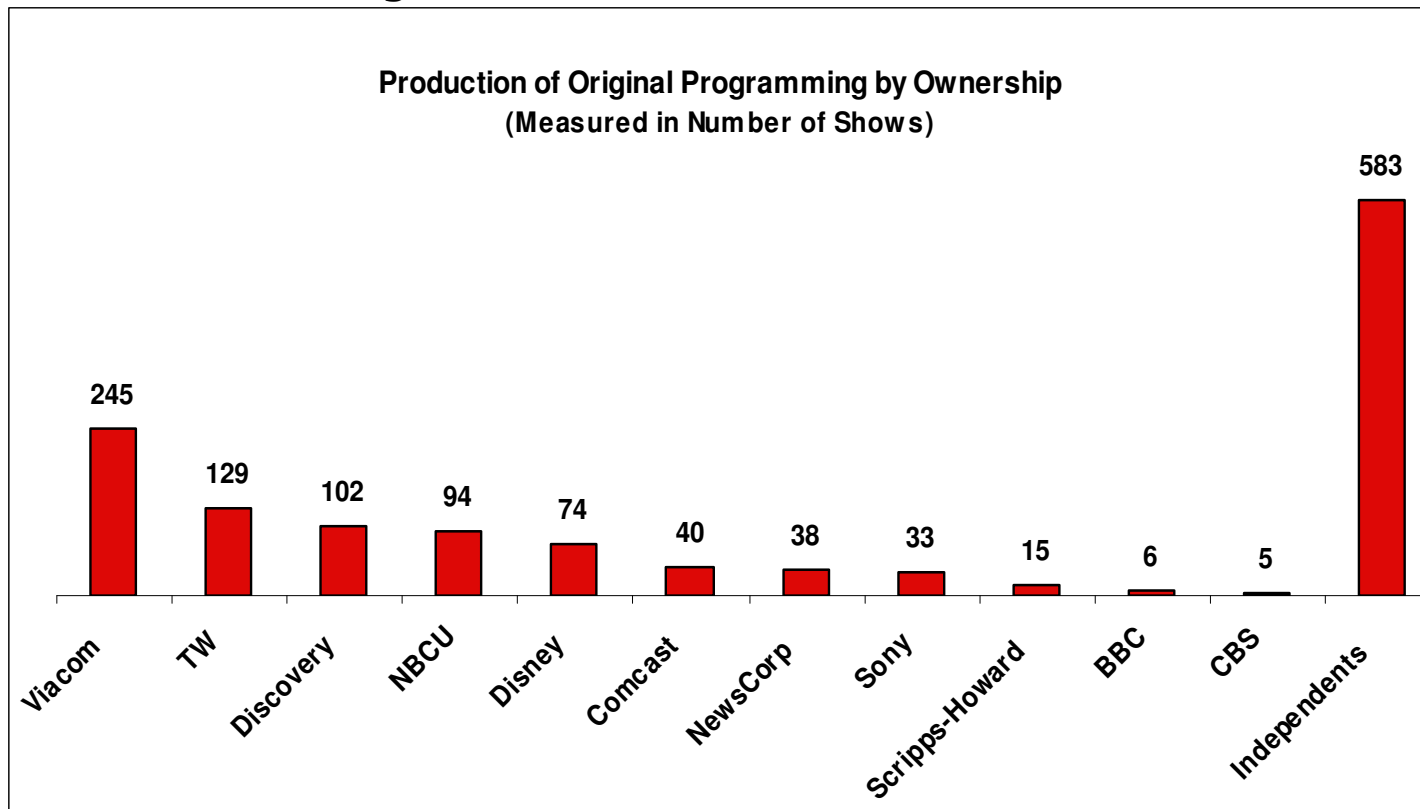
While distribution remains concentrated in networks owned by the large media conglomerates....



Sources: Company websites and Baseline Studio System.

Industry Structure: Cable

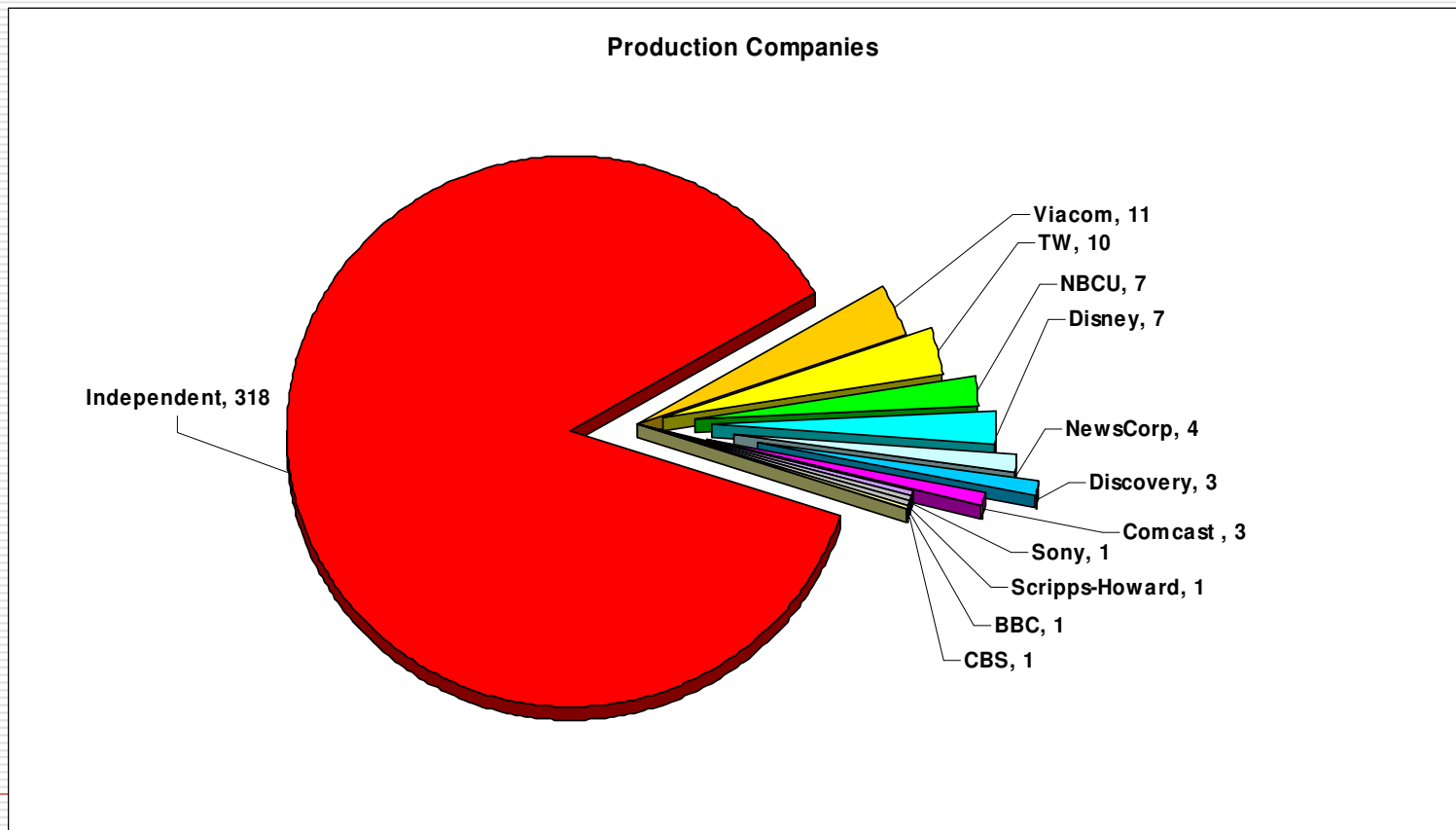
Content production is largely fragmented, as evidenced by the large number of independent companies engaged in production of original content for cable.



Source: TV Tracker.

Industry Structure: Cable

The fragmentation of production poses challenges for unions to capture the new work under their contracts.



Source: TV Tracker

Organizational Changes and Business Strategies

- ❑ In **Radio**, the emergence of new media has intensified competition among the radio companies. Revenues in the traditional terrestrial radio sector have stagnated, and competitive pressures increased because of satellite radio, podcasting and cell phones.
 - ❑ Companies in the sector are adopting new technologies such as digital radio and internet radio, which are expected to experience significant growth. Terrestrial radio companies such as Clear Channel also own stakes and/or are considering acquisitions in satellite radio.
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Organizational Changes and Business Strategies

- In the **Music Business**, sales of CD's continue to decline while digital downloads increase, reaching 16 percent of the total shipments' value in 2006 (see below table). Retail distribution now involves companies from the computer industry, Microsoft and Apple. Apple's iTunes currently holds an 85% share of the digital music downloads in the U.S. The major music labels have digitized and licensed about two billion songs, and there are currently at least 230 online music retailers. The major labels are also considering further consolidation and are partnering with internet start-ups.
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Recorded Music

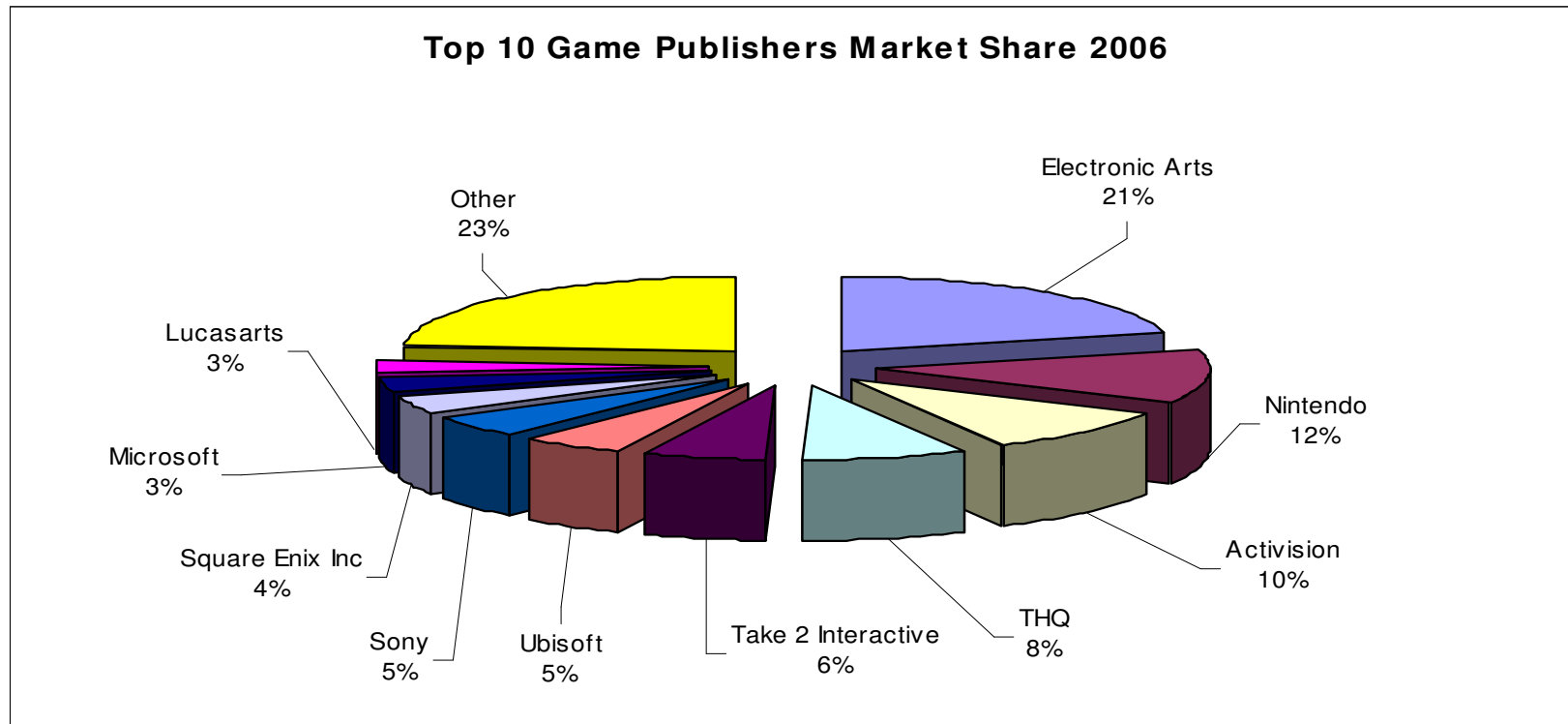
Sales in US \$Millions, and % of Total Sales by Format

Recorded Shipment Statistics								
	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL VALUE	14,584.7	14,323.7	13,740.9	12,614.2	11,854.4	12,338.1	12,269.5	11,510.2
PHYSICAL SHIPMENTS % of Total Value						98.5%	91.2%	83.9%
DIGITAL DOWNLOADS % of Total Value						1.5%	8.8%	16.1%

Source: Recording Industry Association of America: <http://76.74.24.142/6BC7251F-5E09-5359-8EBD-948C37FB6AE8.pdf>

Organizational Changes and Business Strategies

The **Interactive Games sector** is fast growing and profitable, with total revenues at \$10 billion in the U.S. Ownership has become more concentrated over the last 5 years as the top 10 companies now control 76% of the market.



Source: Bear Stearns, Interactive Entertainment, 2007.

Effects of Technological Change on Employment

- Technological change has had both positive and negative effects on employment levels.
 - it has increased employment through the creation of new distribution outlets, which also require new original or modified content, resulting in increased employment in both production and distribution of content;
 - and, it has displaced employees, particularly through automation, smaller and simplified equipment, and computer generated imaging, as well as the continued displacement of musicians through synthesizers, digital mixing and track layering.
 - As a result of the new platforms created by technological change, there are more opportunities for employment of both talent and technical employees in the following sectors:
 - independent film and TV production
 - content production for the internet and portable devices
 - content production for cable industry leaders such as Discovery, Comcast, ESPN and Fox
 - interactive games
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Effects of Technological Change on Employment

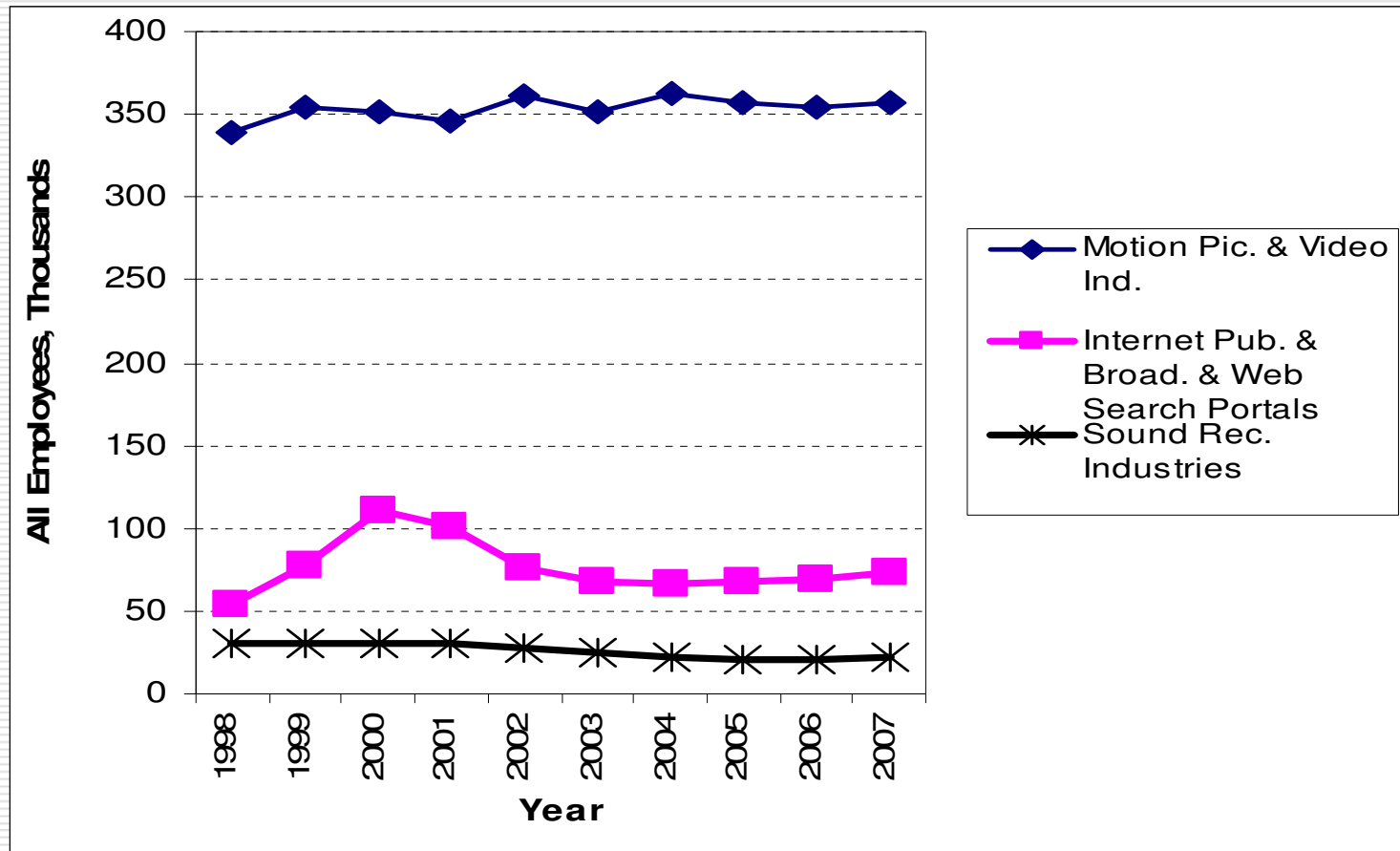
- **In TV content production:** when producing a modified version of a show, like ABC's *Lost*, for viewing on cell phones (mobisodes), it is necessary to do special shootings to adapt the show to the small screen (more close-ups and shorter length, usually 10 minutes). This illustrates how some new technologies generate not only additional revenue streams, but increased employment as well.
 - In the fast growing **Interactive Gaming** sector, companies are employing teams of directors, technicians, editors, actors, musicians, and graphic designers to produce game software.
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Effects of Technological Change on Employment

- ❑ Overall employment has increased in some sub-sectors of the electronic media industry, but the employment gains are uneven for the various occupations partly because of the introduction of labor saving technologies.

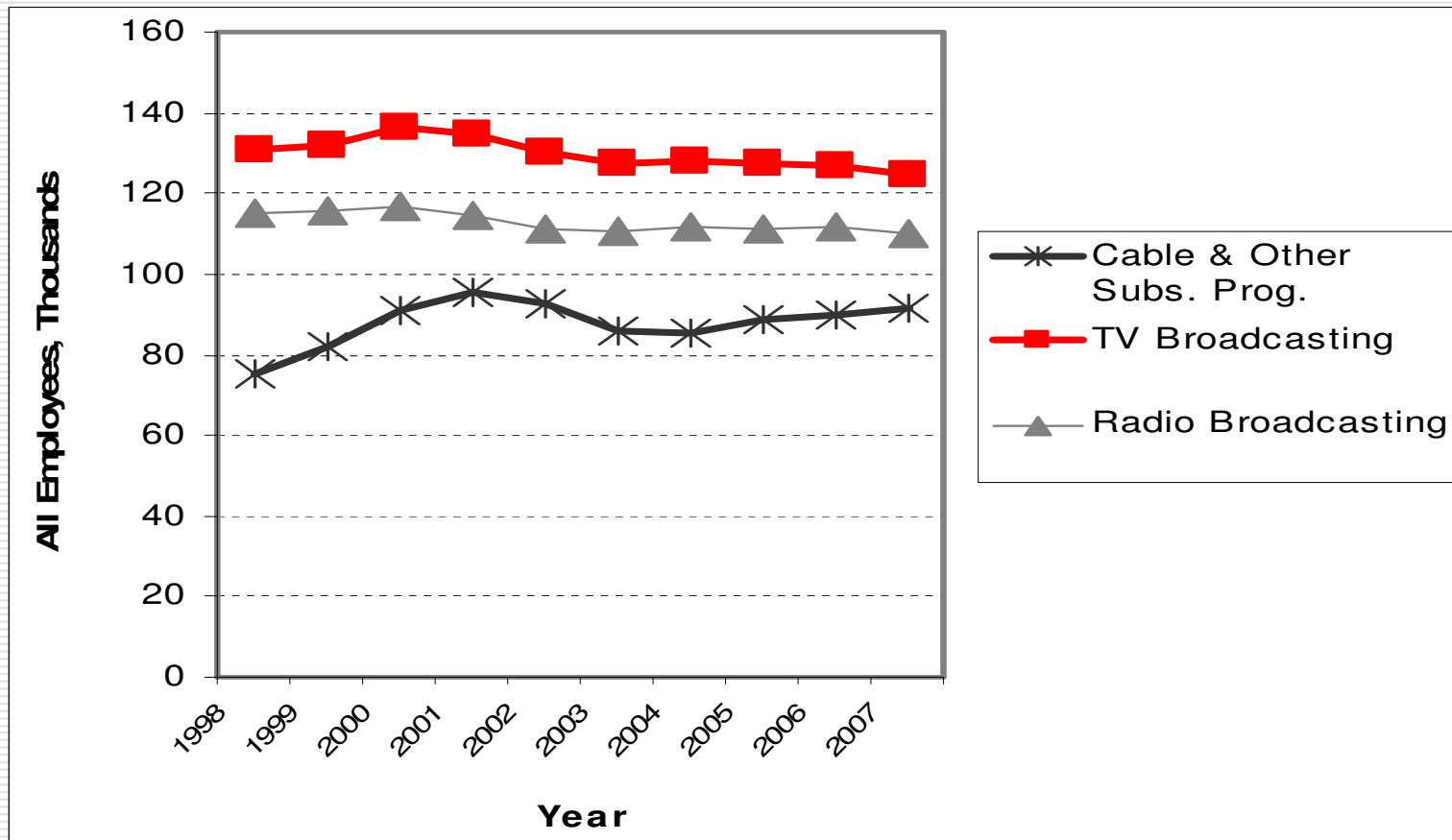
 - ❑ Examples of labor saving technologies include
 - TV and radio broadcasting: control room automation systems that allow one person to do the jobs of five or six employees, and central-programming.
 - In radio: voice tracking and automation that enables companies to operate multiple stations from one building at minimum staff levels.
 - Smaller and more user-friendly equipment allows easy transferability of skills and functions between technical and non-technical employees (e.g. a single TV reporter operating camcorders and replacing an entire crew)
 - In film production: digitally generated imaging displaces set designers and even actors in certain scenes.
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Employment by Industry Sector



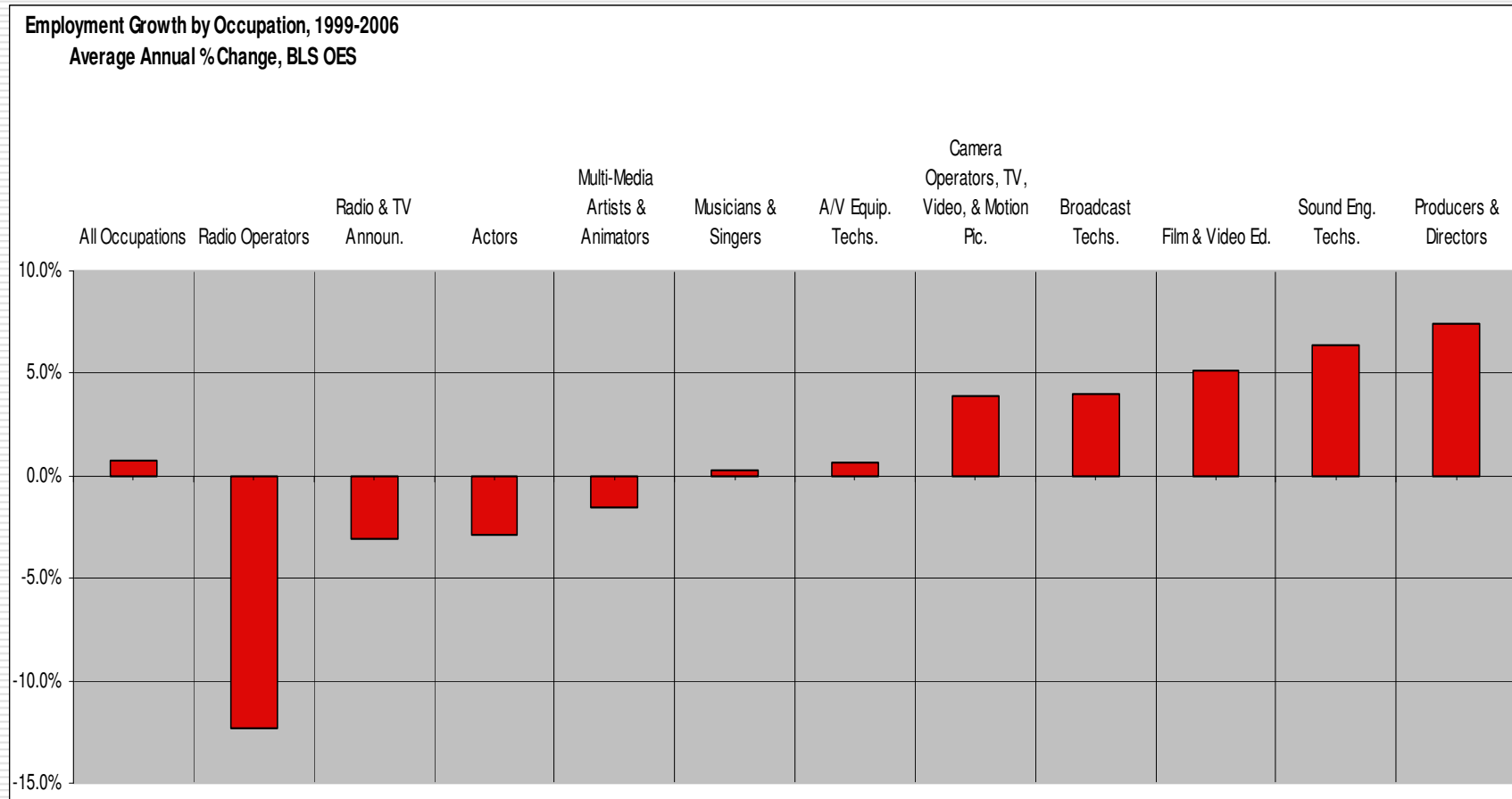
Source: BLS CES

Employment by Industry Sector



Source: BLS CES

Changes in the Occupational Mix



Labor Management Relations

- ❑ Basic terms and conditions of employment in the electronic media industry are set by agreements negotiated by employer associations and unions which are organized by craft or occupation.
 - ❑ In contrast with other American labor organizations, unions in this industry have been growing in membership.
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Major Unions in the Electronic Media Industry

Major Unions in the Electronic Media Industry			
Union	Represents	1967	2006
American Federation of Musicians (AFM)	Musicians in all forms of entertainment, except concerts.	283,200	96,632
American Federation of Television and Radio Artists (AFTRA)	Actors, announcers, & newscasters in live and taped shows for television and radio	23,000	57,452
Directors Guild of America (DFA)	Directors in movies, radios, and TV	3,500	13,124
International Alliance of Theatrical and Stage Employees (IATSE)	Skilled production and technical workers and scenic designers in stage, movies, and TV production operators in movie theaters.	60,000	105,180
National Association of Broadcast Engineers and Technicians (NABET)	Technicians in radio and television	8,600	12,000
Screen Actors Guild (SAG)	Actors in motion pictures & filmed TV productions	26,000	107,567
Writers Guild of America East (WGAE)	Writers for television, movies, & radio.	4,200	23,810
Writers Guild of America West (WGAW)	(Divided into East & West in 1979)		7,627

Sources: 1967 Data from Gray, New Labor Forum, Fall/Winter 2001. 2006 Data from U.S Director of Labor Organizations, 2006. *Figure Reported from NABET.

Bargaining Structure

Bargaining Structure in the Electronic Media Industry		
Employer Groups	Scope of Agreements	Unions
Motion Pictures		
Production		
Alliance of Motion Pictures and Television Producers (AMPTP) (represents studios, suppliers, payroll, and post-production houses)	National, multi-employer	SAG, SEG, AFM, DGA, WGA, IATSE, IBEW, AFL-CIO, Basic Crafts, IBT
Independents*		SAG, SEG, AFM, DGA, WGA, IATSE, IBEW, AFL-CIO, Basic Crafts, IBT
Recorded Music		
Recording Industry of America (RIA)	National, multi-employer	AFM, IBEW, AFTRA
Television and Radio		
AMPTP	National, multi-employer	SAG, SEG, AFM, DGA, WGA, IATSE, IBEW, AFL-CIO, Basic Crafts, IBT
Networks		
ABC	National, single-employer	NABET, AFTRA, IATSE, WGA, DGA
CBS	National, single-employer	IBEW, IATSE, WGA, DGA, AFTRA
NBC	National, single-employer	NABET, AFTRA, DGA, IATSE
Local Radio/Television	Local, single-employer	AFM, AFTRA, NABET, IBEW
Commercial Television	National	AFTRA, SAG
Source: Gray, Lois, and Seeber, Ron. 1996. "Under the Stars: Essays on Labor Relation in Arts and Entertainment."		

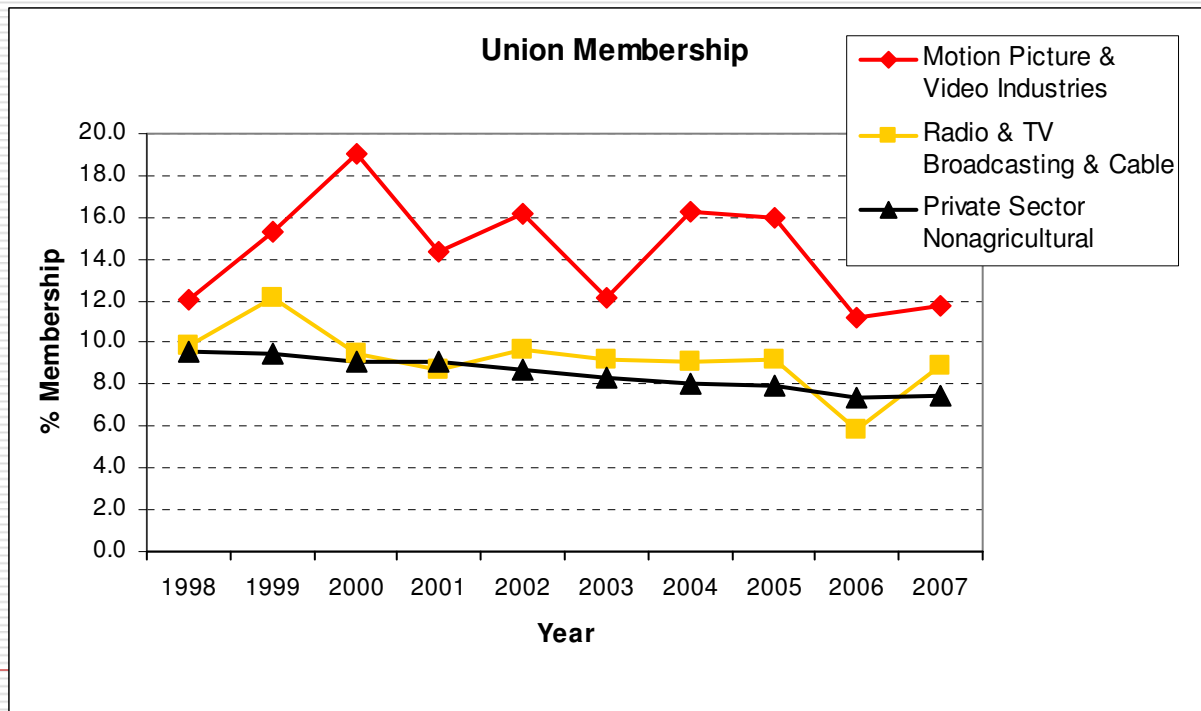
Bargaining Structure and Jurisdictional Issues

- ❑ Despite the proliferation of new owners, employer organization for purposes of bargaining with the unions has held firm with one association, the AMPTP, negotiating for all major employers in motion picture and television and another, the RIAA, representing recording studios.
 - ❑ In contrast, the unions, traditionally fractionalized by craft, have become increasingly competitive and less inclined to cooperate as a result of the scramble for membership created by technological changes.
 - ❑ For example, Writers Guild and Editors Local 700 (IATSE) both claim jurisdiction over the writing or editing done in animation and reality shows and SAG and AFTRA vie for unrepresented actors in cable and the new media.
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Union Density

Estimated Union Density for the Motion Picture and Video Industries is higher than the national private sector average.

However, technological change impacts negatively on union density by creating new distribution platforms for products yet to be organized and, therefore, undermines union bargaining power.



Source: Union Stats.com

Unionization at the Media Conglomerates

- Unions have contracts at multiple business segments of the dominant conglomerates, but unionization concentrates in the so-called traditional media sectors while the new media sectors remain largely non-union.
 - For instance, at NBC-Universal, union contracts cover employees at the broadcasting operations and some of the cable operations, but the digital media segment is not unionized. After the split between CBS and Viacom, the mostly unionized traditional media segments stayed under CBS, while the mostly non-union segments (cable and internet) went to Viacom.
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Issues of Compensation

□ In motion pictures and television, the writers, actors and directors have a three tiered compensation system which:

- (1) Provides minimum pay rates as a floor to compensation
 - (2) Allows personal service contracts for those who can negotiate above the minimum
 - (3) Compensates for reuse of performances (residuals)
 - (4) Pays into pensions and health plans administered by the unions
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Issues of Compensation (cont.)

- ❑ Who and how much to pay for the reuse of product has been a bargaining issue for more than 60 years, fueled by constant changes in technology.
 - ❑ Producers see new use (reuse) of products as a source of additional revenue, while performers view replays as competition with their original work and expect to share in income generated.
 - ❑ Musicians were the first to challenge reuse when their live performances competed with recordings. The Musicians Performance Trust Fund, which AFM negotiated with the RIAA has been hard hit by declining physical sales of recorded music in competition with electronically downloaded music.
 - ❑ The issue of reuse (residuals) has been the focus of major strikes, (8 by WGA and 7 by SAG).
 - ❑ The 2007 walkout of writers focused on the demand for compensation in the internet, with producers contending that income streams for new media are still unknown and difficult to predict.
 - ❑ Compromise in the settlements incorporated in DGA and WGA contracts will continue to be revisited as the parties debate when, how much and in what form to pay for reuse in each new media (i.e. interactive games, iPods, and cell phones and others still to be invented).
 - ❑ IATSE representing skilled technicians seeks to claim the equivalent of residuals in increased employer payments to its health, welfare and pension fund.
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Issues of Compensation (cont.)

Residuals Incorporated in Bargaining Contracts for Motion Picture and Television Industry		
Issue	Pioneer Union	Year
Replay of Recorded Performances on Radio	AFTRA	1941
Films Produced for Theater Shown on TV	AFM	1951
TV Shows Rerun on TV	SAG	1952
TV Commercials Reuse	SAG	1953
TV Shows Exhibited on Foreign TV	WGA	1961
TV Films or Shows Exhibited in Supplemental Markets*	SAG	1971
Programs Made for Supplemental Markets & Shown on TV or in Theaters (Domestic & Foreign)	SAG	1980
Products Made for Basic Cable Exhibited in Other Markets	WGA	1988
Programs Distributed on the Internet	DGA	2008
*Note: Supplemental Markets include Video Cassette, Cable and Pay-Per View		
Sources: 1951-1988 Data from Paul and Kleingartner's Industrial and Labor Relations Review 1994. 2008 Data from Variety.		

Issues of Employment

- ❑ Technicians and craft workers pose different issues for bargaining with employers, - also impacted by the rapid technological changes in electronic media.
 - ❑ Most contentious are work rules such as premium pay for overtime work and numbers of workers required to perform a given job.
 - ❑ Required overtime pay for weekend work triggered a producers boycott of film production in New York City, precipitating the IATSE forced merger of the East and West Coast Cinematographer locals.
 - ❑ Introduction of smaller cameras, with the threat to eliminate jobs has been the continuing subject of dispute between unions and broadcast companies, as reflected in strikes by IBEW at CBS and NABET at NBC.
 - ❑ Digital has opened new areas of negotiations about job classifications and rates of pay for technicians in all sectors of electronic media, film, broadcast, and recording.
 - ❑ Also in dispute is the increasing practice of employers to substitute employees with independent contractors.
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Union Strategies

- Faced with the challenge of technology, employer consolidation and globalization of their industry, unions in electronic media have pursued a variety of strategies:
 - Organizing the non-union sectors
 - Internal Restructuring (e.g. IATSE and AFM)
 - Employer Confrontation on key issues (e.g. residuals)
 - Employer cooperation on mutual interests (e.g. piracy of product)
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