

The Economics of Physical
Distribution: Video
Cassettes/Discs and
Movie Theater
An Anthology

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ECONOMIC ESSAYS ON
THE THEATRICAL MOTION PICTURE INDUSTRY

A DISSERTATION
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OF STANFORD UNIVERSITY
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Economies of Scale

The need for a sales force and a network of regional sales offices is clearly an economy of scale in distribution.⁶ The 1972 Census of Business (59) reports "total expenses allocable to distribution of motion picture exchanges except television" to be 19% of total revenues. The number of regional branch offices maintained by national distributors has slowly declined as the number of films released annually by the major distributors has dropped from about 35 per company in 1959 to only ten or 15 in the mid-1970s. Rising "percentage of gross" fees charged for distribution of outside-financed films and statements of industry personnel suggest this output level per company may be near or below a minimum efficient scale.⁷ The importance of regional offices, however, may be starting to decline since shortcircuited distribution methods (e.g., by telephone from a central office) have recently shown some success.⁸

Another scale economy in distribution is pecuniary, or the economy of risk diversification in production investment. According to the Census of Business, the majority, about 60%, of distributor operating expenses are accounted for by film production investment. Apart from well-known examples of the extreme uncertainty sometimes attached to motion picture investment,⁹ recent indications are that a stochastic relationship between production investment costs and revenues has become a dominant market factor. This is suggested by the fluctuation in the 1973-76 U.S. market share data (Table 2.2), and also by Table 2.4, which records the performance of total world

Table 2.4

Total World Theatrical Rentals, 1965-1975: Four U.S. Distributors
(millions, current)

Firm	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Twentieth Century Fox	102.5	132.2	130.6	123.9	84.7	120.7	155.7	116.3	144.5	160.2	212.5
United Artists	149.2	126.8	123.7	151.7	125.2	118.0	97.2	153.0	163.8	142.7	187.4
Universal Pictures	66.3	69.2	68.3	63.0	63.4	95.4	57.8	61.9	87.5	205.1	289.0
Warner Brothers	66.8	87.2	N/A	102.0	95.6	64.2	86.3	144.3	152.7	275.6	202.3

Source: Annual Financial Reports, 10-k Annual Reports to the Security and Exchanges Commission.

theatrical rentals from annual financial reports of the major distribution companies for which consistent data was available. A usual lag of three months to a year between domestic and foreign release smooths the annual trends in world rentals, but sharp changes are still evident. The impacts of single motion picture releases in changing the fortunes of their distributors in a period when the industry was in overall financial trouble (e.g., 1970-74) are easily identified in the tables (e.g., "The Godfather," Paramount, 1972, \$89 million U.S. and Canadian rentals; "The Exorcist," Warner Bros., 1974, \$82 million; "The Sting," Universal, 1973, \$78 million). The problem of spreading investment risk has come to acutely concern film industry management and also the stock market.¹⁰

The instability of revenues (which has been attributed to a more "fickle" modern audience) has apparently increased steadily since the early 1960s. This was probably an important reason for the merger in the late 1960s of nearly all major distributors into financial conglomerates (e.g., Paramount Pictures into Gulf and Western, United Artists into Transamerica Corp.) or into widely diversified leisure and entertainment complexes. But despite these mergers some distributors, notably Columbia, found it necessary for the first time to begin soliciting outside investor funds for their productions in the early 1970s.¹¹ Another distributor reaction to unstable earnings has apparently been an increased dependence on "blind bidding," a practice by which written guarantees of rental payments are solicited from theaters for an as yet unproduced (or uncompleted) film. This serves to shift

the production risk burden from distributors to theaters. These financial trends further suggest that distribution may be a crowded industry. In comparison to its relatively concentrated and stable condition around the time of the Paramount decision and the introduction of television, the modern distribution oligopoly is best described as battered, but intact. In addition to the decline in measured concentration and the evidence of decreased stability of market shares, the feasibility of sporadic market entry demonstrated by minor distributors in the recent period (see Table 2.2) is by itself important evidence of reduced barriers to entry. On the other hand, most of the shifts in market rank have been within the group of the same six or eight largest companies that have survived the full period. Further, the lack of sustained entry into distribution in the 30 years since Paramount (with the marginal exception of Buena Vista, the distributor for Walt Disney productions), does show that whether because of capital market constraints or cost economies in sales, substantial barriers to entry in distribution do exist.

Theatrical Exhibition and Film Release Patterns

There are currently about 16,000 theaters in the U.S., about one quarter of them drive-ins.¹² (This and other statistics in this chapter count each "screen" in multiplex theater buildings as one theater, since each screen functions in the market as a separate retail outlet. In 1972, eight percent of all theaters, earning 16% of total

revenues, were in multiplex buildings.)¹³ Theaters sell admissions and also average about 12% of their revenues from concession sales. About 80% of the box office dollar -- about \$1.4 billion out of a \$2.4 billion 1977 box office -- remains with theaters to support their maintenance, operation, and profits.

Temporal and Spatial Distribution of Theaters

The market structure of the theater industry must be described in terms of the release patterns of films by distributors. First, release patterns have a temporal component. Though highly varied, there is a consistent element: films are released first to one or a few theaters which charge the highest admission prices, then withdrawn and released to a greater number of theaters charging lower prices, then perhaps similarly for additional stages before release to television in most cases.¹⁴ This system is essentially a method by which distributors price discriminate among consumers with different demand intensities for the same film. In general, the value of the film decreases with its age and less "exclusive," later runs are likely to be at a theater closer to the typical patron. Consumers with high value demands can, therefore, be induced to incur greater travel expenses and pay a higher admission price to see the film on its earliest run. Others wait.

Depending on their quality and location, theaters usually specialize within the temporal pattern and are identifiable by their "policies," e.g., "exclusive first run," "first run" (nonexclusive), "subrun," "art house," etc. By far the bulk, probably over 80%, of theater box office receipts are earned in the first run market (exclusive and nonexclusive).

A spatial component is also integral to film release patterns. "Geographic clearances," which are grants by the distributor to the theater of territorial exclusivity for the showing of each separate film, are part of the lease contract. Depending on the stage of the temporal pattern in question, the distributor presumably chooses a theater location pattern which efficiently covers a market area in terms of admission price, theater capacity, travel time, etc. (see Losch (36), Brauñstein (7)). The practice of guaranteeing territorial exclusivity is typical of franchise operations and is similar to that used in the distribution of other differentiated media products, which like the film, have important public good characteristics. Comic strips, for example, are typically sold to newspapers with a guarantee of exclusive rights within their general circulation area (see Rosso (50)).

In practice, individual theaters usually maintain the same geographic clearance over time, and are typically organized by distributors into "zones," geographic areas within which theaters of the same policy are granted roughly coincident regions of exclusivity. Though less uniform than its close counterpart of the television market, in which exclusive rights for the broadcast of programs are granted to local television stations by the networks, the zone suffices as a general definition of a local theater market.

Columns (1) through (6) of Table 2.5 show representative examples of the temporal and spatial distribution patterns of local theater markets. As indicated in Column (6), films are often released in first run to several theaters simultaneously within the zones of larger cities.

11-10-77

Table 2.5

Spatial, Temporal, and Ownership Patterns: Representative Local Theater Markets

(1) Date	(2) Competitive Area	(3) Population	(4) Total Number of Theaters	(5) Number of First Run Theaters* (Exclusive & Nonexclusive)	(6) Usual Number of Simultaneous First Runs	(7) First Run Theater Ownership**
1972	South Bay Zone (Los Angeles area)	427,000	19	12	2	3: General Cinema (400) 1: Dant (40) 2: Lippert (32) 5: United Artists (400) 1: Pacific (150)
1972	San Fernando Valley Zone (Los Angeles area)	1,027,000	42	35	5 to 7	9: Lippert (32) 9: Pacific (150) 7: NCC (258) 5: General Cinema (400) 5: single owners
1974	Marietta-Smyrna Zone (Atlanta area)	60,800	8	8	1	2: Loews (77) 3: Georgia Th. (59) 3: Eastern Federal (44)
1974	Sandy Springs Zone (Atlanta area)	39,000	6	5	1	1: Eastern Federal (44) 1: Georgia Th. (59) 3: General Cinema (400)

Table 2.5 (continued)

(1) Date	(2) Competitive Area	(3) Population	(4) Total Number of Theaters	(5) Number of First Run Theaters* (Exclusive & Nonexclusive)	(6) Usual Number of Simultaneous First Runs	(7) First Run Theater Ownership**
1974	Miami, Florida (4 zones together)	1,267,000	84	49	5 to 8 among the 4 zones	19: Nonetco (77) 9: Florida St. (NA) 5: Loews (77) 4: General Cinema (400) 3: A-T (NA) 2: Budco (62) 2: Holiday (NA) 3 circuits, 1 each 2: single owners
1973	Cleveland, East Zone	(N/A)	35	21	2 to 3	2: RKD (95) 4: Community (NA) 4: Associated Th. (NA) 5: General Cinema (400) 1: NCC (258) 2: Pitt (NA) 3: Loews (77)

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12

Table 2.5 (continued)

(1) Date	(2) Competitive Area	(3) Population	(4) Total Number of Theaters	(5) Number of First Run Theaters* (Exclusive & Nonexclusive)	(6) Usual Number of Simultaneous First Runs	(7) First Run Theater Ownership**
1973	Cleveland, West Zone	(N/A)	25	17	2	3: Loews (77) 2: General Cinema (400) 1: Modern (NA) 3: Community (NA) 1: RXO (95) 1: General Theaters (NA)
1971	Sacramento, California (1 zone)	250,000	36	12	1 to 3	1: United Artists (400) 2: National General (NA) 2: Cinerama (NA) 2: Synfy (53) 3: General Cinema (400) 2: single owners

* Includes "occasional" first run theaters in at least some cases.

** Parentheses indicate total number of theaters in the designated circuit.

Source: Petitions to the U.S. Government under the Paramount Decrees for Acquisition or construction of Theaters by the Divorced Theater Circuits. See Footnote 15.

South Bay Zone: U.S. v. Loew's, Inc., et al., Petition of National General Corporation, 9/15/72.

San Fernando Valley Zone: U.S. v. Loew's, Inc., et al., Petition of National General Corporation, 10/10/72.

Table 2.5 (continued)

Cleveland East Zone, Cleveland West Zone: U.S. vs. Loew's, Inc., et al., Petition of National General Corporation, West, 1/23/73; East, 2/1/73; Hearing on both petitions, 3/1/73.

Marietta-Smyrna Zone, Sandy Springs Zone: U.S. vs. Loew's, Inc., et al., Petition of Loew's Theaters: Order, 7/2/74, Affidavit of P. Walton, 6/17/74.

Miami, Florida: U.S. vs. Loew's, Inc., et al., Petition of Loew's Theaters, 7/23/74; Hearing, 9/19/74.

Sacramento, California: U.S. vs. Paramount Pictures, Inc., et al., Petition of ABC-Paramount Theaters, 11/24/70, Hearings: 12/10/70, 4/15/71.

Table 2.6

Size and Ownership Characteristics of the 12 Circuits Operating 75 or More Theaters, 1970 (not including the divorced circuits)

Circuit	Number of Theaters	Regional Distribution
General Cinema Corp.	400	not listed
American Multi-Cinema	200	"14 or more states"
Brandt Theaters	147	Primarily NY, NJ, Conn.
Commonwealth Theaters	196	Ark, Cal, Iowa, La, Mo, Neb, MN, SD, Tex, WY
Martin Theaters	165	Ca, Ala, Fl, Ky, NC, Tenn, Va, Miss, SC
Gulf State Theaters	147	Ala, Ark, Fl, La, Miss, Okla, Tex
Pacific Theaters	130	Cal, Ariz, Ore, Wash, Hawaii
Video Independent Theaters	131	MS, Okla, Tex
Kerasotes Theaters	92	Ill, Mo
Northeast Theater Corp.	86	Conn, Ill, Ind, Iowa, Ky, Md, Mass, Mich, NJ, NY, Ohio, Pa, Va
Stewart & Everett Theaters	77	NC, SC, Va
Nonetco Enterprises	77	Fla, Ala, Puerto Rico, Virgin Islands

The 5 circuits divorced by the Paramount Decree are now 4: Mann Theaters, ABC-Paramount, RKO-Stanley Warner Theaters, National General Theaters. Data for this group at this point in time was not available. Source: U.S. Justice Department, Antitrust Division (L-8), p. 21.

A larger number of theaters simply compete for a comparably larger number of film prints. On the other hand, for release of the very highest value films, theaters in several adjacent zones may be in competition for a single exclusive run release.

As shown in column (5) of Table 2.5, the majority of theaters, especially in the newer suburban markets such as the San Fernando Valley, are exclusive and nonexclusive first run. Some theaters mix exclusive with nonexclusive first run policies. Apparently, some of the examples in Table 2.5 also include a few "occasional first run" theaters, those which mix a first run and suburban policy.

Theater Ownership

The majority of all theaters are combined under single ownership into "circuits." In 1975, the approximate sizes of the six largest circuits were reported to be:

Number of Theaters	
General Cinema Corporation	500
United Artists Theaters	500
Commonwealth Theaters	200
Mann Theaters	200
ABC-Paramount Theaters	185
Cinematix	150

There are about 50 other circuits having over 25 theaters each. Over one-half of all U.S. theaters are in circuits with at least five theaters. Table 2.6 shows the size and regional location patterns for the circuits having over 75 theaters as of about 1970. Most of these and smaller circuits own theaters in a number of different local markets.

Table 2.7

Theater Circuit Ownership: Examples of High Local Market Concentration

<u>Date</u>	<u>Competitive Area</u>	<u>Population</u>	<u>Extent of Concentration</u>
1968	Queen's-Long Island, N.Y.	1,986,473	71: United Artists Theaters 24: Century 10: Brandt 6: RKO (includes theaters of all policies) 5: NCC 4: Loews other not available
1971	Minneapolis-St. Paul SMSA	1,704,423	General Cinema Corp. owns 35% of all indoor theaters
1976	Syracuse, N.Y., SMSA	376,169	Cinema National owns 13 of 18 theaters, earns 86% of total box office receipts
1976	Utica-Rome, N.Y., SMSA	180,355	Cinema National owns 53% of all theaters, earns 80% of total box office receipts
1974	Pittsburgh, Pa., SMSA	1,846,104	Cinematheaters owns 63 of 96 total theaters, 11 of 13 downtown first run theaters.

Source: Queen's-Long Island, N.Y.: CCH 1968 Trade Cases, p. 45,071.
 Minneapolis-St. Paul, Minnesota, SMSA: CCH Trade Cases, "Cases Instituted in 1971," p. 53,457.
 Syracuse, N.Y., Utica-Rome, N.Y., SMSA's: Variety, 4/28/76.
 Pittsburgh, Pa., SMSA: Variety, 3/27/74.

Since circuits directly compete only within individual local markets, local concentration is the most important factor. Column (7) of Table 2.5 shows available examples from court records of first run theater ownership in local markets which may be considered typical.¹⁷ Concentration indicated in Table 2.7, however, may be taken as extreme, since these examples were associated with Justice Department investigations or prosecutions under Section 7 of the Clayton Act (merger or acquisition resulting in lessened competition). Zoning information for this group was not available.

It is clear from these data that larger circuits completely dominate first run theater ownership. And, the extent of circuit concentration within local markets varies considerably, including at least a few cases which usual economic classifications indicate as very high.

Historical Perspective

The contrast of the modern theater industry with its predecessor of 30 years ago is more dramatic than that of either production or distribution. Table 2.8 shows aggregate trends recorded by the Census of Business since 1948. Most of the last decades' increase in the number of theaters (col. [1]) has been due to the explosive growth of "multi-screen" theater buildings. The initial increase in average theater capacity after 1948 (col. (5), Table 2.8) reflected the early demise of the smaller, more marginal theaters as television grew. The sharp decline in average capacity after 1963 was due to the growth of smaller capacity theaters in the suburbs at the same time that the huge central city movie palaces built in the 1930s and 1940s began to be torn down.

The greatest theater market changes have coincided with changes in distributor film release patterns. Table 2.9 describes the "Chicago System of Release." This elaborate pattern used for "Class A" Features in Chicago in the late 1930s was a model for other major U.S. cities at that time. Each of the 310 metropolitan Chicago theaters was permanently assigned to a particular run stage (col. 1), admission price (col. 3), length of run (col. 5), and "temporal clearance" (col. 6) by the Chicago Film Board of Trade, a trade association controlled by the major distributors and theater chain owners. (A temporal clearance is a guarantee to a prior run theater that a certain film will not be released to any suburban theater within a certain time interval following the end of the film's run at the prior run theater.) "Class A" films released by each of the major distributors went through each stage of the 11 run, 17 week system. At least for the earlier stages, a given film was exhibited by a progressively larger number of theaters, each set more widely dispersed through the metropolitan area than the last.

Directly comparable data for the modern market is not available, but the major changes are readily apparent. First, the number of stages in the temporal pattern is now reduced. In Chicago, for example, most distributors now release their higher value ("Class A") films in only three or four temporal stages. Single theater exclusive first runs in Chicago and other cities are giving way to "limited engagement" first runs by three or four theaters simultaneously.

A second change is that a much greater proportion of theaters have moved up to first run status, especially nonexclusive first run.

Table 2.8

U.S. Theaters: Historical Data, 1948-1975

	(1) Total Number of U.S. Theaters*	(2) Number of Indoor Theaters*	(3) Number of Drive-In Theaters*	(4) Total Seating Capacity, Indoor Theaters	(5) Average Seating Capacity, Indoor Theaters
1948	18,631	17,689	942	11,701	661
1954	17,371	15,760	1,611	9,482	689
1958	15,076	11,271	3,805	8,854	785
1963	12,040	8,665	3,375	6,870	793
1967	11,478	8,094	3,384	5,910	730
1972	12,798**	9,260**	3,538**	6,063	551
1975	14,225**	11,080**	3,225**		

* These Census of Business data for the number of theaters are consistently lower than data reported in trade sources, which may be more reliable. These data are unaltered to preserve consistency of trends.

** Data listed counts multiplex theaters by the number of different screens. Number of theater buildings:

	1972	1975
Total	11,670	13,000
Indoor	8,528	9,900
Drive-In	3,342	3,100

Source: Census of Business (69), 1948, 1954, 1958, 1963, 1967, 1972. For cols. (1)-(3) for 1975: rates of increase in the number of theaters reported by the National Association of Theater Owners (46), p. 20, are applied to the 1972 Census of Business Data (69).

The consistently 50% or greater proportion shown for the modern markets in Table 2.5 contrasts with a less than 10% average proportion in the pre-Paramount market.¹⁸ (The comparison of these data overstates this change. First, the major increase has been in the less important non-exclusive first run category, including "occasional first run." Further, a suburban zone theater defined as "first run" in Table 2.5 may run films which have already been exhibited in an adjacent zone, e.g., in a downtown exclusive first run theater.)

Closely related to the increase in first run houses has been a shift in the geographic location of theaters. The central city theaters to which suburbanites once flocked for evening entertainment have been replaced by newer and smaller theaters in widely dispersed suburban shopping centers. This change has undermined the value of the downtown exclusive first run engagement and encouraged a widespread general release to suburban theaters at an early, sometimes first run, stage in the temporal pattern.

A fourth change has been reduced regimentation, or uniformity, with which features are released. In the old Chicago system, for example, run length for "Class A" features would vary from its usual one week run time (due to unexpected demand response) only in first run. In the modern market, temporal clearances have nearly disappeared and the distribution pattern, lengths of run, and pricing policies are more often tailor made to each production.

The fundamental economic principles of the old Chicago system are still the basis for modern release patterns. But the mutations have

Table 2.9

The Chicago System of Release for "Class A" Feature Films, 1959

(1) Run Stage	(2) Number of Theaters Classified as Eligible	(3) Admission Price	(4) Number of Theaters Licensed for Each Film	(5) Run Length	(6) Temporal Clearance*
Loop First Run	7	75¢	1	1 week or longer.	3 weeks
A Pre-Release	9	50¢	2	1 week	1 week
B Pre-Release	20	40¢	NA	1/2 week	0-1 1/2 weeks
C Pre-Release	49	30¢	NA	2-4 days	0-5 days
1st week, General Release	81	25¢	NA	2-3 days	0-5 days
2nd week, General Release	115	20¢	NA	2-3 days	0-5 days
3rd week, General Release	40	NA	NA	2-3 days	0-5 days
4th week, General Release		NA	NA	2-3 days	0-5 days
5th week, General Release	23	NA	NA	2-3 days	0-5 days
6th week, General Release	in total	NA	NA	2-3 days	0-5 days
7th week, General Release		NA	NA	2-3 days	0-5 days
Totals:	310				approx. 17 weeks

* For 3rd through 11th run, the theater had in effect a choice for the clearance time within the indicated range. In first week General Release, for example, the theater could exhibit the film for any 2 to 3 day period within an assigned one week interval. Any remainder of the week at the end of the run was clearance time.

Source: Compiled from Conant (15), p. 154-161.

few direct cost advantages to multiple theater ownership.¹⁹ The innovation of the multiple screen theater building in the past decade offers a special exception up to a limit of about eight screens, though 80% of the 652 multiplex buildings existing in 1972 were only dual screens.²⁰ Multiplexes obviously offer substantial savings in capital costs and division of labor. Since each "screen" functions in the market as a separate retail outlet, this has no doubt affected ownership patterns. Circuit combination, however, is a much older innovation than the multi-screen theater building. The lore of the industry, at least, would leave no question that the major advantage of theater concentration is to gain "clout" with distributors (i.e., monopsony power) particularly through large market shares within individual local markets. As shown in Chapter 6 below, this has certainly been an important historical motive for circuit concentration. Its overall importance as a barrier to entry in modern theater markets is controversial, but it is at least still the source of perennial complaint by independent exhibitors against major circuits.²¹

In the sale of admissions to the public, the importance of multiple ownership is moderated because movie theaters compete with a variety of other entertainment activities such as restaurants, clubs, and music concerts within their local regions. With respect to its function as a buyer of film leases from distributors, however, the modern theater industry must be described as oligopsonistic in many if not most local markets. Markets sometimes have a dominant buyer, and typically have only three to six effective competitors for a distinct product. This fact is important because much of the interesting

been considerable. Many factors -- legal, demographic, and the introduction of new media among them -- have contributed to the changes. Speculations about some of the factors are offered in the following essays. It is also evident that the changes in release patterns, particularly the increase in the number of competing first run theaters, has worked to reduce the degree of localized control by individual circuits. A contrast of pre-Paramount with modern theater market concentration is postponed until Chapter 6.

Market Structure and Economies of Scale

Except for some local markets having substantial concentration of theater ownership, modern theatrical exhibition can be described as monopolistically competitive in its sale of admissions to the public. Several sources of product differentiation are basic to monopolistic competition among theaters. First, as in motion picture production, the product sold is inherently differentiated by its copyright. Second, although theaters are often clustered together within zones, the wider spatial separation of theaters showing the same film is a component of product differentiation. Third, the quality of the theater, which is really part of a joint product sold with an admission ticket, varies greatly.

Explanations for multiple theater ownership in terms of economies of scale are hard to find. More efficient management organization and better access to capital are probably significant. However, since theaters are physically self-contained enterprises for which volume buying of the principle input, the film, is illegal, there seem to be

conomic activity, as well as antitrust activity, is not within the relatively inactive consumer market, but involves the function of theaters as buyers of film leases from distributors.

Summary

The modern motion picture industry consists of a monopolistically competitive production branch, an oligopolistic distribution branch, and a largely monopolistically competitive exhibition industry. Significant barriers to entry do exist at least in distribution and apparently in some local theater markets. But concentration in at least production and distribution (for which historical comparisons were made) has declined substantially since the industry's pre-television, pre-Paramount era.

Table 3.1

Net Revenue Data: U.S. Indoor Theaters
1948-1972

	(1) Average Annual Net Revenue per Indoor Theater (1967 \$)	(2) Average Annual Net Revenue per Available Indoor Theater Seat (1967 \$)
1948	\$67,700	\$100
1954	55,700	84
1958	48,800	66
1963	47,400	61
1967	57,200	78
1972	51,300*	78

* Based on a calculation counting multiplex theater buildings by the number of different screens. Based on the number of theater buildings, this entry is \$57,000.

$$\text{col. (1)} = \frac{\text{[Total box office receipts of indoor theaters]} \times \text{[1 - avg. U.S. rental rate]}}{\text{[Total number of indoor theaters]}}$$

$$\text{col. (2)} = \frac{\text{[Total box office receipts of indoor theaters]} \times \text{[1 - avg. U.S. rental rate]}}{\text{[Total seating capacity of indoor theaters]}}$$

Source: Census of Business (69). See Appendix 3-A.

Exhibit 4.2
 Theater Earnings Records
 Example III: Universal Pictures placed at the Chicago and New York Theater Owners,^a
 Philadelphia (first run), 8/1/54 - 8/15/54
 Prevailing Allocation Method: Proportional

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Film/Run/Period	Total Gross	Total Earnings	Total Paid	Total	Gross	Per Length Allocation
MONTEY BLANKSON 8/1/54 - 8/2/54 Chicago	118,478.18	82,888.18	128,488.00	128,488.00	44,888.00	2 weeks 1st stand of 2
SECS OF THE BEACH 8/2/54 - 8/15/54 Chicago	48,000.00	15,150.00	15,000.00	15,000.00	1,111.53	2 weeks 1st stand of 2
THE WITNESS 8/15/54 - 8/22/54 Chicago	21,611.00	12,108.43	11,000.00	11,000.00	1,000.00	2 weeks 1st stand of 2
THE WITNESS 8/22/54 - 8/29/54 Chicago	44,000.00	26,440.00	44,000.00	44,000.00	1,000.00	2 weeks 1st stand of 2
THE WITNESS 8/29/54 - 9/5/54 Chicago	25,201.43	12,722.26	11,000.00	11,000.00	1,200.13	2 weeks 1st stand of 2
THE WITNESS 9/5/54 - 9/12/54 Chicago	57,462.75	18,822.82	56,900.00	56,900.00	2,438.86	2 weeks 1st stand of 2
THE WITNESS 9/12/54 - 9/19/54 Chicago	22,031.28	8,178.82	8,100.00	8,100.00	700.24	2 weeks 1st stand of 2
THE WITNESS 9/19/54 - 9/26/54 Chicago	28,016.82	8,100.00	8,000.00	8,000.00	1,000.00	2 weeks 1st stand of 2
THE WITNESS 9/26/54 - 10/3/54 Chicago	81,475.44	19,078.90	20,000.00	20,000.00	2,218.16	2 weeks 1st stand of 2

^a Including only those films creating over \$10,000.
^b According to the original contract.

Source: Chicago Theater Owners, Inc. vs. Universal Pictures, Inc., et al. (4-28), Transcript P. 283.

Exhibit 4.3

Theater Earnings Records
 Example II: Fox Theater, San Jose (first run), 9/2/61 - 1/22/62
 Prevailing Allocation Method: Competitive Bidding. All Films

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Film	Days Run	Total Gross (\$)	Total Gross per Day (\$)	\$ Paid Distributor Rental per Day	Theater Share (\$) per Day	Bid Guarantee
1	14	113,338	8953	502	450	Net
2	28	24,622	879	414	465	Net
3	7	5,067	724	235	490	Net
4	10	5,068	507	200	360	Net
5	14	10,059	718	646	72	Not Net
6	17	10,077	595	382	210	Not Net
7	20	14,341	717	362	354	Not Net
8	24	32,793	1,366	699	667	Net
9	42	52,410	1,247	584	663	Net
Totals:	176	167,240	Avg: 950	488	462	

Source: Mincheste Drive-In Theaters, Inc. vs. Twentieth Century Fox Film Corporation
 (see Source Exhibit 4.2)

Table 6.4

Numerical Assumptions Applied to Models I-IV

- (1) distribution expenses per patron = \$.20
- (2) exhibition expenses per patron = \$1.20
- (3) production cost per film = \$3,000,000
- (4) total number of separate local exhibition markets = 50
- (5) admission capacity per theater per year = 100,000
- (6) elasticity of total audience w.r.t. the quantity of available films = .4
- (7) elasticity of total audience w.r.t. admission price (defined at the competition equilibrium) = .67 (see Footnote 5)

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Table 6.5

MODEL I

Distributors: Monopolistically Competitive
Exhibitors: Monopolistically Competitive in Each Local Market
No Vertical Integration

<u>Equilibrium Conditions</u>	<u>All Markets Combined</u>	<u>Each of 50 Separate Local Markets</u>
(1) admission price	\$2.00	\$2.00
(2) number of films produced and leased	200	200
(3) number of admissions	1,000,000,000	20,000,000
(4) number of admissions per film	5,000,000	100,000
(5) average weeks played (run length)	2,600	52
(6) number of theaters	10,000	200
(7) rental rate	.400	.400

(8) total revenues	\$2,000,000,000	\$40,000,000
(9) total production costs (rentals less distribution expenses)	\$600,000,000	\$12,000,000
(10) distribution expenses	\$200,000,000	\$4,000,000
(11) exhibition expenses	\$1,200,000,000	\$24,000,000
(12) distributor profits	\$0	\$0
(13) exhibitor profits	\$0	\$0

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Table 6.6

MODEL II

Distributors: Monopolistically Competitive
 Exhibitors: One Market: Monopolized
 All Other Markets: Monopolistically Competitive
 No Vertical Integration

Equilibrium Conditions	All Markets Combined	The Single Nonopolized Market	Each of 49 Competitive Markets
(1) admission price		\$3.19	\$2.00
(2) films produced and leased	196	196	196
(3) number of admissions	991,577,190	12,001,491	19,991,341
(4) number of admissions per film		60,609	100,459
(5) average weeks played (run length)		31.4 weeks	52.3 weeks
(6) number of theaters	9,880	120	200
(7) rental rate		.063	.400
(8) total revenues	\$1,997,436,100	\$38,284,756	\$39,982,682
(9) production costs (rentals less distribution expenses)	\$587,760,710	\$11,940	\$11,994,873
(10) distribution costs	\$ 198,312,090	\$ 2,400,298	\$ 3,998,200
(11) exhibition costs	\$ 119,031,350	\$14,401,789	\$23,989,609
(12) distributor profits	\$0	\$0	\$0
(13) exhibitor profits	\$ 21,471,027	\$21,471,027	\$0

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Table 6.7

MODEL III

Distributors: Monopolistically Competitive
 Exhibitors: All Local Markets Monopolized, Cournot Independent Behavior
 No Vertical Integration

Equilibrium Conditions	All Markets Combined	Each of 50 Separate Local Markets
(1) admission price		\$3.19
(2) films produced and leased*	1	1
(3) number of admissions	48,911,727	978,235
(4) number of admissions per film		-
(5) average weeks played (run length)		507
(6) number of theaters	489	9
(7) rental rate	.063	.063
(8) total revenues	\$156,026,000	\$3,120,520
(9) production costs (rentals less distribution expenses)		
(10) distribution expenses	\$ 9,782,200	\$ 195,640
(11) exhibition expenses	\$ 58,693,000	\$1,173,860
(12) distributor profits	\$0	\$0
(13) exhibitor profits	\$ 87,503,360	\$1,750,540

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*.384 is the actual solution.

Table 6.8

MODEL IV

Distributors: Monopolistically Competitive
 Exhibitors: National Monopoly Covering All 50 Markets
 No Vertical Integration

<u>Equilibrium Conditions</u>	<u>All Markets Combined</u>	<u>Each of 50 Separate Local Markets</u>
(1) admission price	\$3.19	\$3.19
(2) number of films produced and leased	111	111
(3) number of admissions	481,843,570	9,636,860
(4) number of admissions per film	4,189,944	83,799
(5) average weeks played (run length)		43.6 weeks
(6) number of theaters	4,818	96
(7) rental rate	.280	.280
<hr/>		
(8) total revenues	\$1,537,079,100	\$10,741,580
(9) production costs (rentals less distribution expenses)	\$334,014,100	\$6,640,262
(10) distribution costs	\$96,368,000	\$1,927,360
(11) exhibition costs	\$578,843,570	\$11,576,860
(12) distributor profits	\$0	-\$0
(13) exhibitor profits	\$527,853,850	\$10,557,077

HOME VIDEO

A Report on the Status, Projected Development
and Consumer Use of Videocassette
Recorders and Videodisc
Players in the
United States

Prepared for

The Network Inquiry Special Staff

Thomas G. Krattenmaker
and
Stanley M. Besen
Co-directors

Federal Communications Commission

1 November 1979

TABLE II
Advertised Retail Prices

Item	Price Range (\$)	Typical Price (\$)
Videocassette Recorders		
1/2-inch VCR with tuner (weight: approx. 40 lbs.)	980-1,190	1,075
Battery-powered, portable VCR (approx. 18lbs.)	500-1,600	895
VCR with slow-motion and fast-forward image	1,290-1,600	1,350
VCR with 19-25" color TV in console	2,400-3,200	2,400
Videodisc Player	750	750
Blank 1/2-inch Cassette Tape		
T-60	17-19	18
T-120	24-26	25
L-250	11-13	12
L-500	16-19	17
L-750	21-23	21
Prerecorded Cassette Program		
One-half hour or less length	15-50	39
One hour or feature length movie	50-100	60
X-rated movie	70-175	100
Prerecorded Video Disc Program	16-25	25
Accessories		
Black & White camera (with power supply, case, standard lens, see-through viewfinder)	250-600	395
Color camera (same as above)	700-1,100	890
Microphone	30-100	40
Zoom lens	120-400	220
Optical viewfinder		220
Cassette changer		100
Battery pack and charger		90

Home Video Recorders: Rights and Ratings

by Donald E. Agostino, Herbert A. Terry, and Rolland C. Johnson

Given that many VCR uses now appear legal, has the network broadcasting system of television program delivery anything to fear from the infant VCR business?

To date there have been several major surveys of VCR owners. Kalba-Bowen Associates surveyed 600 VCR owners in 1978, and Field Research and Crossley Surveys each conducted interviews in 1978 for use in the Betamax proceedings. Arbitron interviewed persons in 300 VCR homes in late 1978, and Mediastat placed viewing diaries in 250 VCR households in the summer of 1979 (2, 4). While none of these studies can by themselves provide the whole picture, together they give a pretty good image of recent VCR use by current owners.

The principal use of the VCR is for time-shift viewing. Kalba-Bowen found that 72 percent of VCR owners use the machines to tape programs they were

unable to watch contemporaneously with the broadcast. In the Field survey, 75.4 percent of owners reported time-shifting was half or more of their VCR use. Crossley found that 82.4 percent of VCR recording was done while the person was not watching TV or was viewing another channel. In the Arbitron survey 73 percent gave as the reason for buying a VCR the ability to record while away from home, viewing another program, or asleep.

Because both major U.S. audience rating services—A.C. Nielsen and Arbitron—now include an indication of VCR use, this time-shift phenomenon is generally an asset to the broadcasters and networks. Shows which would have been missed can now be viewed later, and this viewing is properly attributed in audience reports. This audience, previously unavailable to the broadcaster, is now present and counted. However, potential audience is "lost" for broadcast programs aired while the recording is viewed. Since most of the programs recorded for time-shift viewing were regularly scheduled, prime-time shows and most playback of these shows was in non-prime time within a week of the broadcast, VCR time-shift use expands the most lucrative audience, that of prime time.

The majority of programs recorded at home are regular TV series; the second most common type is broadcast movies. Arbitron found 36 percent of home cassette recordings were movies, while Mediastat diary data indicated 27 percent. Other TV specials constituted 11 percent, and sports programs three percent.

There also appears to be little danger to the size of broadcast audiences because of VCR owners repeatedly viewing tapes from a library of prerecorded favorites. The Field study found that about 55 percent of VCR owners had fewer than 10 tapes in their libraries, although the average number is 32. Forty-three percent of owners have no movies in their library. Sixteen percent of the respondents in the Kalba-Bowen study indicated they never saved recorded shows longer than one month, and another 62 percent indicated they had done so ten times or less. This would indicate that if VCR owners were to view each stored tape once a month, over two-thirds of them would spend 10 hours or less a month viewing library recordings. This is a relatively small amount of time in terms of broadcast viewing, and it does not necessarily decrease the time spent viewing real-time broadcast programs.

Nor, at present, does viewing of prerecorded tapes account for much VCR use. Total sales to date of prerecorded tapes amount to an average of about two for every VCR unit. Arbitron reported that only 22 percent of VCR owners used prerecorded material. Of those, 68 percent bought the tapes, 20 percent borrowed them, and another 10 percent traded for them.

Major movie firms have only recently become involved in the sale or rental of tapes. It remains to be seen what impact the promotional efforts of these and other packagers will have on the prerecorded tape market. At \$50 to \$80 per movie, the likelihood of an individual stocking a video library with purchased cassettes is not great. It is also too early to estimate the growth of formal and informal exchange clubs and other rental systems, and how much television viewing time might be absorbed by tapes from these sources.

The deletion of commercials when recording programming is another area of concern. The Crossley and the Arbitron surveys asked owners whether they

used the fast-forward control to skip recorded material during playback. Eighteen percent in the Field study reported they did, and 25 percent in the Crossley. These persons skip over commercials most of the time, but also delete program promotions, time-outs in sports, and other low-interest material. Commercials can also be deleted by use of the pause button during recording if someone is present and viewing the show being recorded. Eighty percent of the owners surveyed by Arbitron said they had done this to eliminate broadcast commercials from their recordings.

The impact, therefore, of VCR use on broadcast audiences and revenues is currently minimal and generally positive.

Few viewers own VCRs, and these tend to be young, professional, upscale "early adopters." Given even optimistic projected sales for the next five years, VCR penetration will still likely be far less than 10 percent of U.S. households. Purchasers are likely to be unrepresentative of the population and their VCR use will have a negligible or only minimal effect on broadcasters' audience-based revenue. This does not imply, however, that the combined effect of all alternative delivery systems—subscription TV, full-service cable, and home media—will not be notable.

When the home medium of cartridge television was introduced in the early 1970s, it was heralded as "... the greatest (media) revolution since the book" (*Fortune*, May 1970, p. 71) which would "uproot all political, educational and commercial establishments" (*Newsweek*, May 31, 1971, p. 78). Early indicators are that the home VCRs will not live up to that enthusiastic billing. Neither will anticipated VCR use shake the foundations of broadcasting nor raise many copyright problems unanticipated by recent legislation.

The encouraging conclusion, therefore, is that the lawmakers and policymakers, broadcasters, program producers and VCR manufacturers will probably avoid major conflict with further VCR development and use. The somewhat discouraging conclusion is that, so far, use of VCRs seems unimaginative, conditioned more by viewing habits learned in connection with traditional broadcasting and as yet not much affected by the great flexibility of the VCR as a home medium.

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INTRODUCTION TO VIDEODISC SYSTEMS,
PRODUCTION, AND MARKET DEVELOPMENT

A Report Prepared For

Corporation for Public Broadcasting
Office of Science and Technology

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Table 1.
Videodisc Formats And Player Capabilities

PLAYER CAPABILITY GROUPS	FORMATS		
	CED (Stylus Grooved)	VHD (Stylus Grooveless)	LASER (Optical)
1. Simple Player	RCA SFT 100 (\$499)	JVC Player	(B)
2. Enhanced Player	(A)	JVC Player with optional attachment	Pioneer VP 1000 (\$750)
3. Interactive Player			DiscoVision 7820 (\$2475)
4. Player/ Auxiliary Computer			(C)

NOTES: Figures in parentheses are suggested retail prices. The JVC player, due in early 1982, has not yet been assigned a suggested retail price.

(A) RCA is expected to market an enhanced player if a market demand develops.

(B) A Group 1 laser player is expected before the end of 1981.

(C) There is no disc player as such in this category. Groups such as Bell & Howell and The University of Nebraska ETV Network are developing software and interfaces to enable an end user to formulate a Group 4 package.

STRENGTHS AND WEAKNESSES OF VIDEODISC SYSTEMS

In general, too much attention has been directed towards the competing videodisc systems, and too little attention has been given to the quality of programming which is available or planned for each. Nonetheless, a few comparative points about the alternative systems are important to note.

CED

- CED requires a plastic sleeve for each disc. This not only adds a cost to the manufacturing process, but can render the disc useless if the sleeve should break or malfunction. Moreover, the cost of the plastic sleeve neutralizes what might otherwise be a cost advantage for CED in the manufacturing of discs. Thus, the price of CED and Laser discs in retail stores is virtually identical; most discs retail between 15 and 25 dollars.
- Early reports on CED players and discs have given them good marks for quality and durability (see Consumer Reports, July 1981).
- By using an older technology and a no-frills design, CED can offer the lowest price for a player (Zenith's CED player is available for \$395 in New York discount stores). However, the price differential between CED and laser players is not as large as was expected (a Pioneer laser player is available for \$540 in New York discount stores). Further, the expected development of solid state components for laser players in 1983-85, may reduce the price differential further.
- RCA has a superior distribution system. By the end of 1981, approximately 60% of all video hardware outlets in the U.S. will carry RCA Selectavision players or a compatible CED player.
- Both the CED player and software are directed towards the largest existing consumer demand for entertainment: movies.

LASER

- There have been some reports about early problems with consumer laser players. The Pioneer and Disco-Vision players have received better reports. In addition, many early laser discs had quality control problems. Apparently, the problems have been rectified to a large degree (for one evaluation, see Consumer Reports, April 1981).
- The added features associated with the laser system are not reflected in the discs which are available in retail stores. Only a handful of available discs make use of freeze frame, chapter segmentation or searches for individual frames.
- The laser system has made strong inroads into the industrial market. Virtually all of the existing applications of videodisc for training and sales promotion make use of a laser disc system.
- The enhanced features of the laser system are in tune with recent consumer interest in "doing something" with electronic technology (e.g. video games, personal computers, and interactive cable television) rather than passively watch programs.
- Many advanced features of the laser disc make what may be its strongest asset in education: simple control of program materials by the instructor. Unlike 16mm film or most video cassette players, the laser disc permits a teacher to review materials before a class, note the frame numbers, and plan a lesson around specific segments. The teacher can then stand in front of a class, press the frame numbers on a keypad, and the player will find the segment precisely.

VHD

- Little will be known about the quality and durability of VHD players and discs until they reach the market in early 1982. As in the case of CED, VHD discs have a plastic sleeve which adds to its manufacturing cost and can render the disc useless, if the sleeve breaks or malfunctions.
- The modular approach of the VHD system, placing added features in a separate optional attachment, would appear to have some advantages. However, the price of

a VHD player with optional attachment is not yet fixed. Clearly, this will affect the appeal of a modular approach.

- Distribution outlets for VHD players are much more limited than for CED players. Further, there are some indications that the system will receive a much stronger marketing effort in Japan, initially. In this sense, the U.S. consumer may be introduced to VHD very slowly.

SYSTEM CHANGES 1981-83

In the short term, 1981-83, it appears that intense competition among laser, CED and VHD systems will encourage each to fill-in capability and price gaps for their respective systems. As a result, each format will offer disc players in additional Groups (i.e. Groups 1,2,3 and 4 discussed on p 4). For example, Hitachi will offer a CED player with stereo in 1982. RCA has suggested that it will offer a Group 2 enhanced player if consumers demand those features. It is also expected that Pioneer will offer an optional interface between its Group 2 consumer model and an external computer. Currently, such an interface must be purchased from another company (e.g. DiscMaster 1000 RS-232C) and installed by the user or an outside agent.

These changes will further reduce price and capability differences among systems and may increase consumer confusion. In addition, producers and distributors of programming may begin to question if three systems are necessary when differences among them have been blurred.

Table 3

STRAIGHT TRANSFER SCENARIO

A public television station seeks to transfer a 50 minute program onto videodisc and manufacture 800 discs. The program is intended for straight play and contains no interactive elements.

Master set up @ 1500 per side.....	3000.00
Encoding of frame numbers.....	550.00
800 discs @ 10 each.....	<u>8000.00</u>
Total	11550.00

Table 4

INTERACTIVE VIDEODISC SCENARIO

A producer of educational programming seeks to create an original 50 minute videodisc for use in geometry instruction, and to manufacture 800 discs. The videodisc will require a moderate amount of interactive computer programming: several multiple choice questions, and the option to view instructional segments in any order, based upon a table of contents. Assuming that a master videotape has been produced, the costs associated with mastering and manufacturing the discs would approximate the following:

Master set up @ 2000 per side.....	4000.00
Encoding of frame numbers.....	550.00
Check cassette to verify frame numbers...	120.00
Check disc to test control program.....	400.00
Computer programming development 6 days @ 450 per day.....	2700.00
Data entry.....	60.00
Record control program.....	100.00
300 discs @ 17.30.....	<u>13840.00</u>
	Total 21770.00

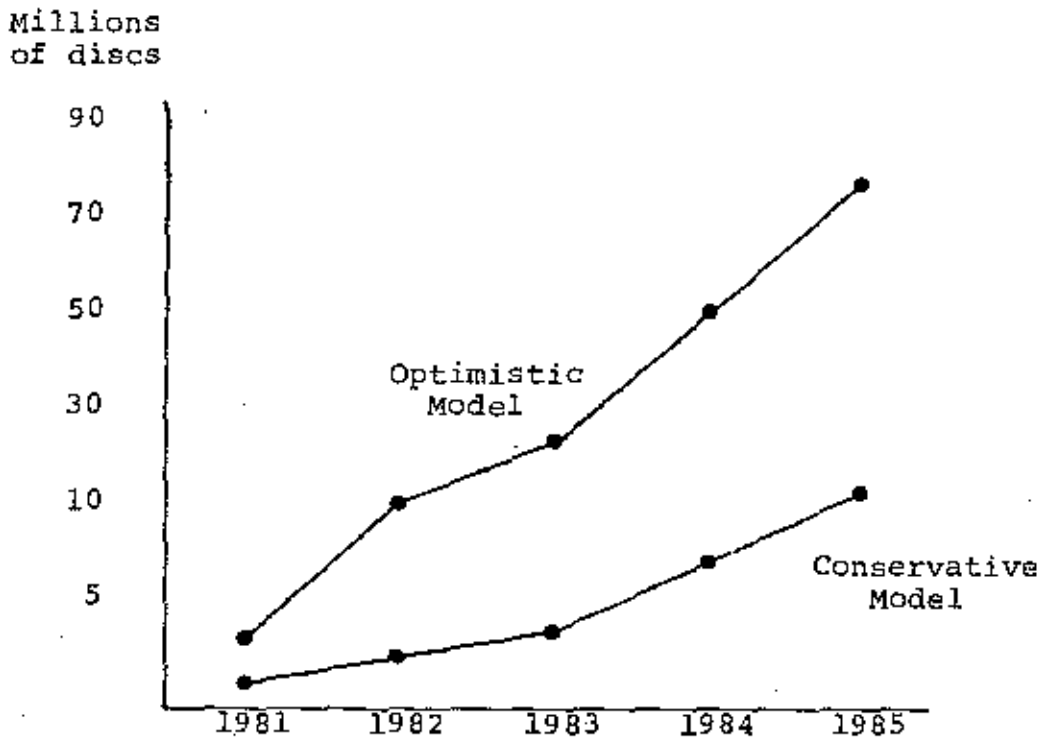
The scenarios above do not include costs of labels and jackets, shipping, or any labor/overhead costs associated with managing the project.

SPECIAL PRODUCTION ISSUES

As a new medium, it might be expected that videodiscs would create a new set of production issues which require special attention. This is indeed the case. Among the production issues which require such treatment are: freeze frames on motion video segments; mixing film and videotape elements; picture levels; and field accurate editing. This report is not the appropriate forum to discuss these and other production issues in detail. However, it is important to note that the preparation of video materials prior to videodisc mastering requires some adjustments from a broadcast approach.

per year thereafter. Aggregating new and veteran owners could yield sales of 6.5 discs per unit, per year. Table 6 below charts a conservative and an optimistic model of videodisc sales, based upon the figures in Table 5 of projected players in the marketplace between 1981-85.

Table 5
PROJECTED VIDEODISC SALES PER YEAR

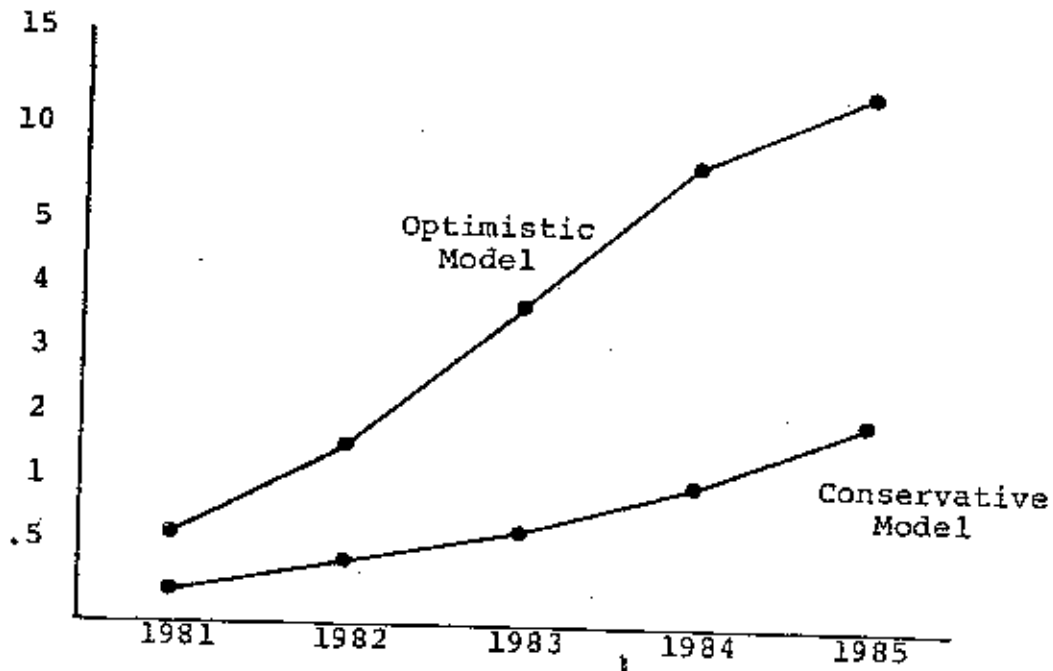


Currently, most videodiscs aimed at the consumer market retail at 15-25 dollars per program or movie. Using these figures, it is possible to estimate that gross sales of videodiscs in the consumer market might reach .26 billion dollars (conservative estimate) to 1.7 billion dollars (optimistic estimate) per year by 1985. It is not yet clear whether a videodisc rental market will develop, as it has in pre-recorded videocassettes, or

Table 5 below charts two published estimates for the sales of videodisc players through 1985 (estimates for sales beyond 1985 are highly speculative). These may be regarded as a conservative projection and an optimistic projection.

Table 5
PROJECTED VIDEODISC PLAYER GROWTH
(Total Number of Players in the Marketplace)

Millions
of units



Sources: Business Week, July 1980 (Conservative Model);
Wertheim & Company, January 1981 (Optimistic Model).

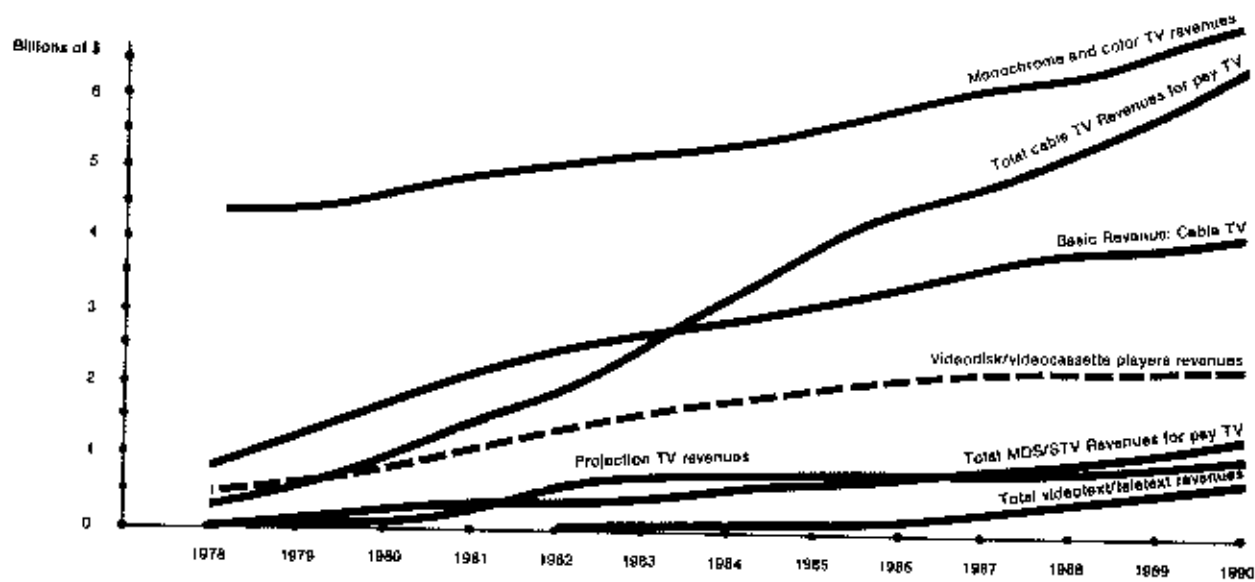
These conservative and optimistic models may be used to project annual sales of videodiscs.

High Definition Television to the Year 2000

**A report for CBS Television Network
January 1982**

KALBA BODEN ASSOCIATES INC

Table 7: Video/Videocassette Players Consumer Spending



Projections	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Households with TV sets (MI)	74.2	75.6	77.9	79.4	80.7	82.2	83.7	85.2	86.3	87.5	88.7	89.9	91.1
VCR/disco units sold (000)	401	475	875	1,220	1,680	2,050	2,480	3,000	3,700	4,505	5,322	7,763	9,900
Average price/unit (\$)	1,160	1,077	1,000	922	850	784	723	667	650	674	621	608	596
Total volume (000)	465	511	875	1,100	1,436	1,607	1,797	2,001	2,408	2,222	3,255	2,288	2,174

1. Unit sales for 1978-1980 are based on VCR sales only. Prices and projected unit sales for 1981-85 are based on The Emerging Video Disc Market, Argus Research, 1980. Projections to 1990 assume a 5% learning curve. We have also assumed that after VCR videodisc player unit sales equal one third of color TV unit sales, then growth of the former will parallel growth of the latter.

THE MEDIA SCENE
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THE MEDIA SCENE

WHAT WILL IT LOOK LIKE ?

Doyle Dane Bernbach, Inc.

VIDEO CASSETTE RECORDERS ANTICIPATED GROWTH

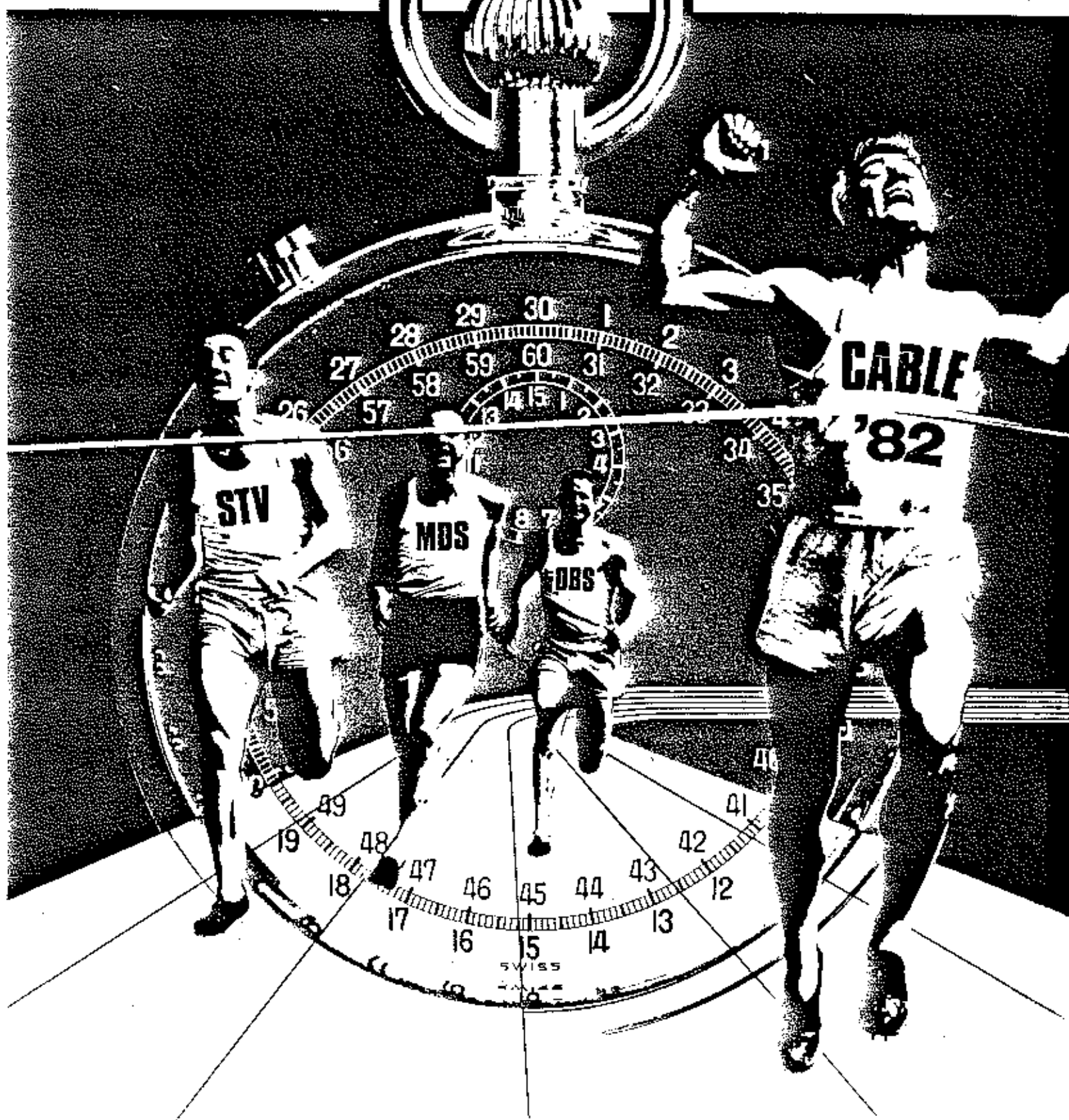
	<u>1983</u>	<u>1985 (Est.)</u>	<u>1990 (Est.)</u>
Player Units	5.3 Million	10.0 Million	18.1 Million
% Penetration of U.S. TV Homes	6.4%	11.6%	19.0%
Pre-Recorded Tape Unit Sales	7.0 Million	15.0 Million	27.1 Million
Pre-Recorded Tape Retail Sales	\$350 Million	\$620 Million	\$1.4 Billion

VIDEO DISCS ANTICIPATED GROWTH

	<u>1983</u>	<u>1985 (Est.)</u>	<u>1990 (Est.)</u>
Video Disc Players	0.5 Million	1.2 Million	5.7 Million
% Penetration of U.S. TV Homes	0.6%	1.4%	6.0%
Video Disc Unit Sales	6.0 Million	13.2 Million	45.6 Million
Video Disc Retail Sales	\$120 Million	\$264 Million	\$980 Million

Industry Viewpoint

OCTOBER, 1982



Star Wars release pattern

June 1982 - Videocassette rental-only plan
 Summer 1982 - Videocassette sales plan
 Summer 1982 - Theatrical re-release
 September 1982 - Pay per view
 February 1983 - Pay cable
 February 1984 - CBS-TV

There aren't many "Star Wars" obviously, but a number of films may be handled this way in the future. In looking at the sequence, one will note the placement of pay per view after videocassettes and before pay cable. The post-video cassette release reflects a fear of taping off cable; the pre-HBO distribution the fact that whatever its cut, the income per viewer to Fox on a pay-per-view basis will be substantially greater than what it gets from pay cable. The studio has reportedly sold "Star Wars" to Showtime, The Movie Channel, and Spotlight for a \$1.00-1.25 or more per subscriber; but HBO still hasn't bought.

Anyway, additional experiments are going on in pay per view at the system level. Group W Cable is testing films in its addressable system, in Middletown, Connecticut, for \$3 a shot. Gill Cable's Bay Area interconnect is doing likewise and regularly drawing 15-20% response rates. Rogers' Portland, Oregon system is showing two movies a month, priced at \$4 to \$8 each.

The real catalysts, however, will be the emergence of distribution networks and the availability of addressable boxes.

On the first point, Oak Media has been formed to distribute events to STV and cable. The well-known prizefight promoter, Don King, has organized a venture, as well. The bigger moves, however, are most likely yet to come. One is likely to be a consortium headed by ABC. After previously announcing a deal to organize pay-per-view sports offerings with Getty's ESPN, ABC has also joined with Cox Cable in planning pay per view offerings, initially on Cox Systems. Rumblings suggest that ABC is soliciting other pay-per-view partners, presumably in cable or STV with subscriber bases as the attraction and/or with film studios. Plans for ABC to distribute Don King's fights have also been rumored.

At Time Inc., the purchase of the advertising-supported USA Network brought with it partnerships with MCA and Paramount. These were to include a pay-per-view network as well. MCA is,

however, distributing "Pirates of Penzance" on its own, and that studio and Paramount were negotiating to become partners in Warner/Amex's "The Movie Channel," which might make their relationship with HBO-parent Time Inc. somewhat questionable.

The wide-ranging discussions between CBS and Twentieth Century Fox undoubtedly also encompass the pay-per-view question. We would also suspect that Showtime and the other film studios have had talks. Viacom's recent convertible debenture prospectus states that it is negotiating with third parties to resell the Showtime half that it is buying back from Westinghouse, or more than 50% of that network, as noted.

The role of the studios is important for other than the immediately obvious reason. For one, pay per view is likely to be a medium of exclusive events per network, unlike present-day pay cable; second, the studios have vowed to never again let a medium arise that is dependent on their product without their having some control and profit participation in the program distribution networks (as opposed to their situation vis a vis the television networks and HBO, in particular.) In fact, it isn't actually certain that they can't deal directly with cable/STV operators. Yet, since pay per view is likely to consist of more than just films and involve network scheduling, promotion and even the creation of events, there would appear to be the need for a packager. Furthermore, as in the case of pay cable, it is difficult to deal with thousands of individual cable systems, though the bulk are increasingly concentrated among a relative few MSOs.

ABC reportedly sounded out the cable industry on some pay-per-view ideas last fall, but the industry felt that ABC didn't yet have enough real events to sustain even a once a month schedule. Of course, that is partly a matter of pricing too. Over the past year, we gather the idea has formed of offering a greater variety of events, plays, concerts, and movies. Still, if ABC has had trouble coming up with a year's worth of product and product is likely to be exclusive, it raises the question of how multiple networks will survive. One answer might be higher subscriptions through the Qube approach of constantly available fare. Still, that probably is impractical without two-way boxes, and only Warner/Amex and a few systems roped in by franchise promises are likely to install two-way devices over the foreseeable future.

In any event, in looking at it from the cable operator's viewpoint, we can make a couple of observations: (1) Pay per view ought to produce at least a couple of dollars a month per subscriber, with Qube's \$8-10 a likely ceiling for now, because the impulse nature permitted by Qube's two-way equipment won't be available initially to most cable subscribers. While Qube offers all the major pay-per-view events available to cable and STV, it also constantly provides at much lower prices products that would probably not be feasible on a one-way basis. (2) Profit margins will probably be lower than on a conventional pay service. While things are still in the formative stage, the promoters and/or product suppliers are looking for box office type cuts of 50% or more; and those figures do not yet allow a spread for a middleman. The latter could range upwards from 10%, we would guess. (3) There will also be promotional costs involved that exceed pay cable's since events have to be promoted individually. Although much of this may occur at the network level, local expenditures are also likely to exceed those on the present pay cable channels.

Next year ought to be the breakout year for pay per view. The number of events scheduled by various promoters is nearly up to one a month already and addressable decoder shipments are accelerating. The organization of pay networks will probably occur over the next 12 months as well.

If supplier estimates of 2 million or more addressables annually are finally met, the industry ought to have at least 5 million potential pay-per-view customers by the end of 1984, excluding systems using disposable traps.

Donaldson, Lufkin & Jenrette

As noted, cable subscription to pay-per-view events has consistently trailed STVs. A good deal of the discrepancy has to do with relative efficiency of promotion, since STV does not have the benefit of impulse buys of two-way, which could be the other logical explanation.

While pay-per-view penetration ratios of various events could quite likely range from under 10% to STV's 50% plus for really big fights, let us assume that a 25% average can be sustained. Let us further figure average retail prices at \$7.50, reflecting a range from \$5 films to \$15 special events. Figuring that there might be enough profit to sustain twice-a-month showings by 1985 (between films, plays, concerts, sporting events and staged events), pay per view at retail would be a \$225-million business at that point. That works out to \$0.50 per average basic industry subscriber in 1985, the figure we incorporated into our 1985 forecast of monthly pay rates from pay cable in Table 7. Looking at it another way, it would represent \$3.75 a month more from customers in systems with addressable (mostly one-way) decoders.

We touched on the issue of the possible effect of pay per view on conventional monthly subscriptions in discussing our understanding of the Qube experience. In that case, the influence is indiscernible, judging by still-high pay/basic penetration rates and pay-per-view income of \$8 to \$10 a month. As noted, however, the Qube system is two-way, encouraging impulse buying.

From an economic standpoint, the basic services offer 25 to 30 films a month at \$8 or about \$0.30 each, so they remain far more attractively priced than the pay-per-view product. That most likely means the latter will not displace the former. Yet, it also means that pay-per-view events will have to be special or relatively cheap, or both, to be profitable.

By 1990 we assume that at least two-thirds of industry subscribers have access to pay per view, e.g. that given its likely economic potential all but the smaller systems where pay response is usually lower will have upgraded to addressability. We also figure that, where available, pay per view can generate \$9 a month, or the equivalent of another of today's pay channels. More events, more promotional spending, development of events for pay per view including nonentertainment product, growth in two-way systems, and expansion in real income are among the reasons that we think this will happen. What we are really trying to say is that there would appear to be the potential to sell a cable customer the equivalent of another pay channel, from a budget standpoint, and that whatever the route, entrepreneurs will be able to deliver product to tap the market to this degree. Given the history of cable (pay cable, which only began in earnest in 1975, is now available to more than 95% of cable subscribers), we think that this forecast is more likely to prove conservative than overly optimistic.

With two-thirds of our 53.5-million average 1990 subscribers paying \$9 a month on average from special events, pay per view would be a \$4-billion business, and cable's biggest nontraditional source of income.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
Amendment of 47 CFR § 73.658(j);)
the Syndication and Financial)
Interest Rule)

BC Docket No. 82-345

To: The Commission

COMMENTS OF CBS INC.

VOLUME I

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January 26, 1983

TABLE 1

Status of Video Outlets: 1982

	<u>Percentage of Homes Passed</u>	<u>CABLE Average Number of Channels</u>	<u>MDS Channels</u>	<u>Total UHF & VHF Channels</u>	<u>Video Cassette Recorders</u>	<u>Radio Stations</u>
1. New York	40%	31	3	14	392,800	39/78
2. Los Angeles	24	24	5	18	253,548	32/73
3. Chicago	5	34	2	12	181,676	39/67
4. Philadelphia	29	28	6	11	146,239	30/44
5. San Francisco	64	27	3	12	119,786	28/52
6. Boston	23	25	3	9	115,294	21/50
7. Detroit	5	31	3	8	101,818	23/38
8. Washington, D.C.	9	27	1	9	89,840	20/40
9. Cleveland	30	27	3	6	85,348	21/32
10. Dallas-Ft. Worth	2	38	2	9	83,351	20/39
11. Pittsburgh	49	15	1	8	74,867	22/37
12. Houston	25	26	2	5	78,360	26/35
13. Minneapolis- St. Paul	5	29	1	6	66,881	27/35

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TABLE 1 (Continued)

Status of Video Outlets: 1982

	<u>Percentage of Homes Passed</u>	<u>CABLE Average Number of Channels</u>	<u>MDS Channels</u>	<u>Total UHF & VHF Channels</u>	<u>Video Cassette Recorders</u>	<u>Radio Stations</u>
14. St. Louis	4	22	1	6	62,888	21/37
15. Seattle-Tacoma	41	23	3	7	66,382	26/47
16. Atlanta	12	35	1	6	66,382	23/32
17. Miami	28	35	2	9	67,879	17/37
18. Tampa- St. Petersburg	44	21	2	8	57,398	13/33
19. Baltimore	14	30	1	6	52,906	22/28
20. Denver	2	27	1	5	53,405	22/32
21. Indianapolis	19	23	2	7	48,913	20/24
22. Sacramento	23	21	2	6	49,911	18/24
23. San Diego	79	32	2	4	42,424	19/34
24. Portland	2	18	3	5	48,414	24/33
25. Kansas City	37	29	1	6	42,424	16/31

TABLE 2

Availability and Use Of Electronic Mass Media (Millions): 1970-1990

	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1982</u>	<u>1986</u>	<u>1990</u>
<u>Number of TV Households</u>	59	70	78	83	90	97
<u>Basic Cable</u>						
Homes with Access Subscribers	9 5	20 11	35 19	45 28	75 41	82 58
<u>Pay Cable</u>						
Homes with Access Subscriptions	- -	4 .5	26 9	42* 23	70* 46	76* 65
<u>STV & MDS</u>						
Homes with Access Subscribers	- -	3 NA	22 1	35 3	49 6	59 8
<u>Low Power TV</u>						
Homes with Access Subscribers	- -	- -	- -	NA NA	.4 .36	10 .8
<u>Direct Broadcast Satellite</u>						
Homes with Access Subscribers	- -	- -	- -	- -	72 2	97 11

* In 1982, 93% of the television households passed by basic cable had access to at least one pay cable service. Assuming that the basic-to-pay ratio remains constant through 1990 (a conservative estimate given the anticipated expansion in channel capacities, see supra note 106), pay cable will be available to 70 million households in 1986 and to 76 million households in 1990.

TABLE 2 (Continued)

Availability and Use Of Electronic Mass Media (Millions): 1970-1990

	1970	1975	1980	1982	1986	1990
<u>Videocassette Recorders</u>						
Homes with Access	-	70	78	83	90	97
Owners		.3	2	5	13	15
<u>Videodisc Players</u>						
Homes with Access	-	-	78	83	90	97
Owners		-	.02	.3	3	7
<u>Videogames</u>						
Homes with Access	-	70	78	83	90	97
Owners		NA	11	15	22	29

NA = Not Available

Sources: Donaldson, Lufkin & Jenrette, Industry Viewpoint: Cable '82 at 7, 9, 35 (Oct. 1982); Paul Kagan Assocs., Inc., Cable TV Databook 36, 51 (1982); Media Science Newsletter, June 1-15, 1982, at 2; Doyle Dade Bernbach, Inc., The Media Scene: What Will It Look Like? 11 (1982); Television Digest, Inc., Television Factbook, Services Vol., at 79-a, 83-a (1981-82 Ed.); Titsch Publishing, Inc., Cablefile 93 (1982); Paul Kagan Assocs., Inc., MDS Databook 13 (Oct. 1982)

Table prepared by Alan Pearce, Ph.D., January 18, 1983

TABLE 12

Media Activities of Selected Participants in Video Marketplace

Company	Cable System Ownership	Broadcast TV Ownership	Theatrical Film Production/Distribution	Cable Network Service Ownership	Original Broadcast/Cable Program Production	Broadcast Syndication	Video Cassettes/Discs	MDS/STV/SMARTV/Teletext
American Express Co.	x			x	x			x
Coca-Cola Co. (Columbia Pictures)			x		x	x	x	
Cox Communications	x	x		x	x			x
Dow Jones and Co.	x			x	x			x
Embassy Communications	x	x	x		x	x	x	x
Getty Oil Co.				x	x			x
Gulf & Western Industries, Inc. (Paramount Pictures)			x	x	x	x	x	
Hearst Corp.		x		x	x	x		
Lorimar			x		x	x		
NCA, Inc.			x	x	x	x	x	
Metrmedia, Inc.		x			x	x		
MGM/UA			x		x	x	x	
Multimedia, Inc.	x	x			x	x		
S.J. Newhouse & Sons	x			x				x
Oak Industries Inc.	x		x	x	x	x		x

TABLE 12 (Continued)

Media Activities of Selected Participants in Video Marketplace

Company	Cable System Ownership	Broadcast TV Ownership	Theatrical Film Production/Distribution	Cable Network Service Ownership	Original Broadcast/Cable Program Production	Broadcast Syndication	Video Cassettes/Discs	MDS/STV/SMARTV/Teletext
Orion Pictures, Inc.			x		x	x		
Reeves Communications Corp.			x		x	x		x
Storer Communications, Inc.	x	x		x				x
Taft Broadcasting Co.	x	x	x	x	x	x		x
Tele-Communications, Inc.	x			x				
Telepictures Corp.			x		x	x		
Time Inc.	x	x		x	x			x
Times Mirror Co.	x	x		x				x
Tribune Co.	x	x			x			
Turner Broadcasting System, Inc.		x		x	x	x		
Twentieth Century-Fox Film Corp.			x		x	x	x	
Viacom International Inc.	x	x		x	x	x		x
Walt Disney Productions			x	x	x	x	x	
Warner Communications Inc.	x		x	x	x	x	x	x
Westinghouse	x	x		x	x	x		

Sources: Advertising Age, June 28, 1982, at M-43, M-52 (for Hearst and S.I. Newhouse); Annual Reports and Forms 10-K (for remaining listed companies)

TABLE 13

Gross Revenues for Selected Companies Engaged in Video
Distribution Market, Fiscal Year Ending in 1981 (\$000s)

American Express Co.	7,211,000	
Coca-Cola Co. (Columbia Pictures)	5,889,000	
Cox Communications	403,497	
Dow Jones and Co.	641,024	
Embassy Communications	NA	
Getty Oil Co.	13,251,560	
Gulf & Western Industries, Inc. (Paramount Pictures)	5,477,741	
Hearst Corp.	NA	
Lorimar	169,504	(7/31/82)
MCA, Inc.	1,328,988	
Metromedia, Inc.	461,781	
MGM/UA	299,404	
Multimedia, Inc.	195,276	
S.I. Newhouse & Sons	1,400,000	
Oak Industries Inc.	507,119	
Orion Pictures, Inc.	102,694	
Pioneer Electronic Corp.	1,433,755	
Reeves Communications Corp.	231,149	(6/30/82)
Storer Communications, Inc.	276,437	
Taft Broadcasting Co.	358,196*	(3/31/82)
Tele-Communications, Inc.	181,426	(6/30/82)
Telepictures Corp.	36,932	(1/1-9/30/82)
Time Inc.	3,296,382	
Times Mirror Co.	2,155,970	
Tribune Co.	1,406,320	
Turner Broadcasting System, Inc.	95,047	
Twentieth Century-Fox Film Corp.	567,462	(8/28/82)
Viacom International Inc.	210,436	
Walt Disney Productions	1,005,040	
Warner Communications Inc.	3,237,153	
Westinghouse	9,367,500	
CBS	4,125,954	
ABC	2,443,713	
RCA	8,004,800	

* Net Revenues

NA = Not Available

Sources: Advertising Age, June 28, 1982, at M-43, M-52 (for Hearst and S.I. Newhouse); Annual Reports and Forms 10-K (for remaining listed companies)

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Amendment of 47 CFR §73.658(j);
the Financial Interest and
Syndication Rules

BC Docket No. 82-345

COMMENTS OF
NATIONAL BROADCASTING COMPANY, INC.

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January 26, 1983.

d. Video Cassette Recorders (VCR's)
and Video Disc Players (VDP's)

Two other technologies that the Commission could not have considered in 1970 are video cassette recorders (VCR's) and video disc players (VDP's), neither of which was on the market at the time. Use of VCR's and VDP's permits viewers to rent popular video programming of their choice for as little as \$3.00 a day and thus offers competition to broadcast net-

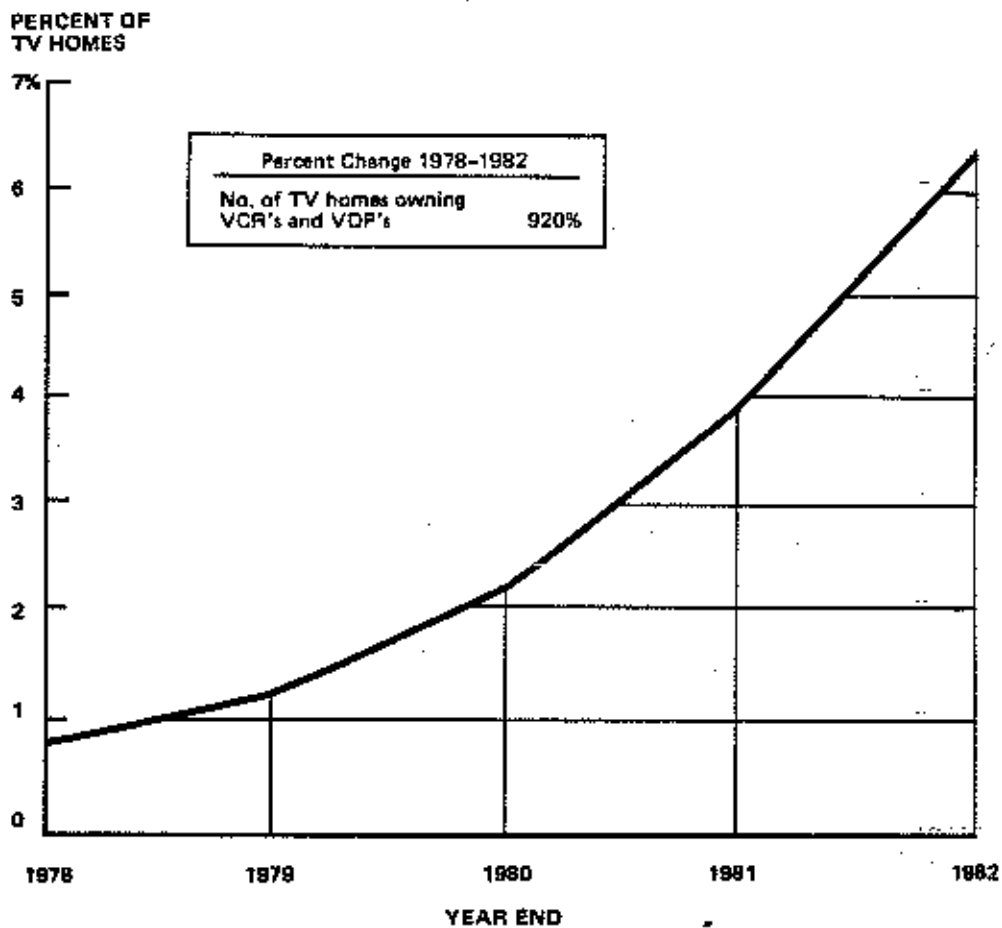
works and the alternative media that proliferate in today's home-video program distribution marketplace.¹ Viewers can also purchase cassettes or discs at prices which constantly are being reduced. E.g., TV Digest, Jan. 10, 1983, p. 13.

Not only do cassettes and discs offer another means of distributing video programming to viewers, they necessarily require the television set to be used and therefore prevent the simultaneous viewing of other programming. VCR's also permit viewers to "program" shows originally aired in different time slots against the offerings of broadcast stations and cable systems. The time-shifting capability of VCR's is particularly important in markets where viewers have a significant number of broadcast stations or alternative program distribution systems such as cable, STV, and MDS from which to choose.

Today over 6% of the nation's television homes own VCR's or VDP's, compared to less than 1% just four years ago. Moreover, the number of homes owning a VCR or a VDP has increased nine-fold in this four-year period. This growth is illustrated in the following chart:

-
1. While these technologies require the acquisition of hardware as well as software, they may be comparably priced to cable when the necessary equipment is rented or purchased on credit through monthly installment payments.

GROWTH IN PERCENT OF TV HOMES OWNING VIDEO CASSETTE RECORDERS OR VIDEO DISC PLAYERS



Source: The Home Video & Cable Yearbook 1982-83, p. 135 (VCR's), p. 139 (VDP's).

Last year alone, American consumers spent more than \$1.5 billion on VCR and VDP hardware (i.e., the machines themselves). An additional \$511 million was spent on software (i.e., programming). The Home Video & Cable Yearbook 1982-83, p. 2.

These figures will increase with the penetration of these new technologies. It is forecast that by 1985, 12% of television homes will own VCR's or VDP's and that 25% will be so equipped by 1990. Variety, Aug. 18, 1982, p. 46 (J. Walter Thompson estimates). Booz, Allen & Hamilton Inc. estimates that by the latter year, consumers will be spending as much as \$3.8 billion annually on programs for use on these machines. These technologies obviously offer increased marketing opportunities for suppliers and viewing opportunities for the public that the Commission could not possibly have anticipated when the Financial Interest and Syndication Rules were adopted.

THE DUAL ROLE OF THE MAJOR HOLLYWOOD STUDIOS:
BROADCAST NETWORK SUPPLIERS AND NETWORK COMPETITORS

STUDIO	COMPETITIVE ROLE	SUPPLIER ROLE
Warner Brothers (Warner Communications)	<ul style="list-style-type: none"> Partial owner of The Movie Channel, Nickelodeon, MTV, Showtime*, Home Sports Network-Pittsburgh**, Houston Sports Channel** Partial owner of the sixth largest cable operator VCR and VDP program distribution 	<ul style="list-style-type: none"> Four prime time series in the current season, including <u>Alice</u> and <u>Private Benjamin</u> Feature films and made-for-TV movies
Paramount (Gulf & Western)	<ul style="list-style-type: none"> Partial owner of The Movie Channel, Showtime*, and USA Network VCR and VDP program distribution 	<ul style="list-style-type: none"> Nine prime time series in the current season, including <u>Happy Days</u> and <u>Laverne & Shirley</u> Feature films and made-for-TV movies
Universal (MCA)	<ul style="list-style-type: none"> Partial owner of The Movie Channel, Showtime*, and USA Network VCR and VDP program distribution 	<ul style="list-style-type: none"> Six prime time series in the current season, including <u>Magnum, P.I.</u> and <u>Quincy, M.E.</u> Feature films and made-for-TV movies
Columbia (Coca-Cola)	<ul style="list-style-type: none"> Exclusive distribution arrangement with HBO, which includes up-front financing for feature films VCR and VDP program distribution 	<ul style="list-style-type: none"> Six prime time series in the current season, including <u>Fantasy Island</u> and <u>Bart to Bart</u> Feature films and made-for-TV movies
MGM/UA	<ul style="list-style-type: none"> VCR and VDP program distribution 	<ul style="list-style-type: none"> Four prime time series in the current season, including <u>CHIPS</u> and <u>Fame</u> Feature films and made-for-TV movies
Twentieth Century-Fox	<ul style="list-style-type: none"> VCR and VDP program distribution 	<ul style="list-style-type: none"> Four prime time series in the current season, including <u>M*A*S*H</u> and <u>Trapper John, M.D.</u> Feature films and made-for-TV movies
Walt Disney	<ul style="list-style-type: none"> Owner of The Disney Channel*** VCR and VDP program distribution 	<ul style="list-style-type: none"> One prime time series supplied in the current season - <u>Walt Disney</u> (the longest running series ever) Feature films and made-for-TV movies

* Proposed merger, The Wall Street Journal, Jan. 10, 1983, p. 4.

** Proposed. See chart re planned cable networks.

*** Launch expected in early 1983.

FINAL REPORT TO
CORPORATION FOR PUBLIC BROADCASTING
MARCH 1983

NEW TELECOMMUNICATION TECHNOLOGIES
AND
PUBLIC BROADCASTING

JOHN CAREY AND MITCHELL MOSS

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Table 24

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ESTIMATED VCR GROWTH IN THE CONSUMER MARKET

<u>Year</u>	<u>Total # VCRs In Marketplace</u>	<u>% Penetration Households</u>
1982	4.0(Million)	4.8%
1985	7.5	8.4
1990	17.4	17.7

(Note: Mean retail price for prerecorded movies is approx. \$50.)

Table 25

ESTIMATED PRERECORDED VIDEOCASSETTE SALES

<u>Year</u>	<u># Videocassettes</u>	<u>Retail Revenue</u>
1981	4.5 (Million)	\$240 (Million)
1985	8	400
1990	16	800

(Note: Mean retail price for prerecorded movies is approx. \$50.)

The above estimates are calculated within the parameters suggested by Hough's research. With VCR growth approximating 150% per year during the first five years, it would be reasonable to expect an average growth rate of 70% during the first ten years, and a somewhat slower rate thereafter. Prerecorded videocassette growth was lower during the first three years in which data are available, averaging 90% per year. This would suggest a lower growth rate during the first ten years of sales (relative to VCRs). Such a forecast is reinforced by the expected competition from cassette rentals and the sale of videodiscs. That is, many of those who are inclined to buy and keep video materials are likely to be attracted to videodisc.

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Table 27

ESTIMATED GROWTH OF VIDEO DISC
(All Systems)

<u>Year</u>	<u>Videodisc Players (Total in Market)</u>	<u>Videodiscs (# Per Year)</u>	<u>Disc Revenues</u>
1982	.3 (Million)	2.5 (Million)	\$ 62 (Million)
1985	2.8	19.6	490
1990	7.8	54.6	1,092

If videodisc survives, revenues from the sale of discs are likely to be substantial. Further, a significant revenue stream is likely to come from education, as well as the home market. N.A. Philips reports that more than 60 colleges and 200 hospitals purchased disc players through 1981. In addition, the U.S. Army has invested heavily in videodisc for education and training.

The potential market among consumers and in education provides sufficient reason for public broadcasters to monitor videodisc closely. It should also be noted that public broadcasting currently has considerable expertise in videodisc production.

THE NEW TV TECHNOLOGIES:
THE VIEW FROM THE VIEWER - II

AN AMERICAN CONSENSUS REPORT

© Benton & Bowles, Inc. May 1983
909 Third Avenue
New York, N.Y. 10022

VIDEO CASSETTE RECORDERS

Highlights And Implications

THE VCR MARKET IS GROWING,
BUT STILL FACES RESISTANCE . . .

Penetration of VCRs is increasing

- o 7% of households currently own a VCR (compared to 2.6% two years ago)

And owner satisfaction is very high

- o About three-quarters of all VCR owners are very satisfied with their machine

But interest among non-owners is falling

- o Only 5% of potential buyers definitely plan to buy (down from 7%), and
- o Three-quarters of non-owners do not intend to purchase (versus 69% two years ago)

Price has come down -- and people know it

- o 39% of non-owners now estimate the price to be under \$500 (up from 29%)
- o 71% peg the price at under \$750 (up from 50%)

But not far enough, as interested prospects still want a better deal

- o 53% of those considering buying are waiting for the price to fall still further

GROWTH COULD
COME FASTER . . .

Targeting specific market segments could accelerate growth of VCR sales:

- Heavier selling efforts directed at men should be used
 - o Husbands, more than three times as often as their wives, are most influential in deciding to buy a VCR
- Cable households deserve more attention
 - o Pay-Cable subscribers show higher than average interest in VCRs
 - o Movies are the shows most frequently recorded on VCRs

VCR manufacturers should investigate advertising on Cable/Pay-Cable and joint marketing efforts with Cable operators

VCR GROWTH MAY AFFECT
ADVERTISING EFFICIENCY

- o Movies, mini-series, and daytime serials are recorded more often than other types of shows
- o But well over half of all VCR owners frequently skip over commercials when watching shows they have recorded

If and when VCRs penetrate a sizeable proportion of TV homes, the advertising value of these frequently recorded program types may be lessened substantially

• And Buyers Are Very Satisfied

Compared to what they expected, owners of VCRs are very satisfied with their purchase

	<u>VCR Owners</u> (168)
Very satisfied with VCR	72%
Somewhat satisfied with VCR	22
Not too satisfied with VCR	3
Not at all satisfied with VCR	1

...Because They Use Their VCRs

The average VCR household records over five hours of programming every week.

Average Hours Recorded By Household Per Week

<u>Hours</u>	<u>VCR Owners</u> (168)	<u>Hours</u>	<u>VCR Owners</u> (168)
0	9%	7-10	13%
1-2	21	11-15	8
3-4	26	16-20	3
5-6	17	21+	2

...To Record Many Kinds Of Programs

VCR owners use their machines to record a wide variety of programming, with movies, followed by programs continued on more than one evening the most frequently recorded types of shows. Some programs, however, such as game shows and news shows are rarely if ever recorded.

RECORDERS
FILMERS
MULTI-MEDIA
INTERACTIVE TV

<u>Program Type</u>	Frequency Of Recording Among VCR Owners (168)			
	<u>Often</u>	<u>Sometimes</u>	<u>Rarely</u>	<u>Never</u>
Pay-Cable movies*	48%	25	8	12
Movies on regular TV	22%	41	17	16
Programs continued on more than one evening	19%	33	17	27
TV drama series	16%	27	15	37
Situation comedies	16%	14	19	47
Daytime serials	16%	8	8	63
Entertainment specials	14%	32	20	29
Sports shows	10%	30	11	44
Variety shows	4%	15	26	51
News shows	4%	8	16	67
Game shows	1%	4	7	80

*Among 60 Pay-Cable households.

...Heavy VCR Users Record
More Kinds Of Shows

Heavy VCR users (record 5 or more hours per week) don't just record more of what light users record, they frequently record many more types of shows. Although both groups like to record movies, light users tend to use their VCR to record "special" kinds of programs, while heavier users often record everyday shows such as daytime serials and sit-coms.

CONSUMER
 RESEARCH
 INTERACTIVE TV

VIDEODISC PLAYERS

Highlights And Implications

THE CURRENT VIDEODISC BUSINESS
HAS NOT GOTTEN OFF THE GROUND

Ownership and interest are virtually non-existent

- o Less than 1% of all households own a VDP
- o Only 12% of all consumers show any interest in buying in the future

in spite of the fact that familiarity is growing

- o 78% of consumers have at least some familiarity with VDPs (compared with 47% two years ago)

Consumers who know most about VDPs see high price and low utility. They say

- o Inability to record (44%)
- o Price (34%), and
- o Limited software (26%)

are major reasons for not buying

Without product and strategy changes, the VDP business will not survive. Consumers' perceptions, primarily based on familiarity with the stylus-type (non-laser) VDP, must be changed. Sellers must communicate

- o Technological advantages of the laser type videodisc player (picture/sound quality, random access, etc.)
- o Variety and flexibility of software (informational, games, educational, narrowcasting, entertainment, etc.)

and very importantly,

- o Invest sufficiently to insure that the variety of software necessary to drive the business exists

Only with these shifts in marketing orientation will the VDP industry have any chance for success

Consumer Electronics U.S. Sales By Product Category

Video Hardware • Video Software
Audio Equipment/Blank Tape
Computers and Games Hardware & Software

- Actual Sales Figures Through 1982 From Electronic Industries Association Marketing Services Department Published Statistics (based on data submitted by individual manufacturers).
- Projected Sales Figures For 1983 Based On Electronic Industries Association Marketing Services Department Statistics to Date Adjusted for Seasonal Variations; and Consensus of Various Industry Sources.
- Other Figures (Estimated) Based On Consensus of Various Industry Sources Collected by Electronic Industries Association Marketing Services Department.
- Telephone and Computer Statistics From Sources as Cited.



ELECTRONIC INDUSTRIES ASSOCIATION
CONSUMER ELECTRONICS GROUP • JUNE, 1983

VIDEO SOFTWAREVIDEO HARDWAREVIDEO CASSETTE RECORDERS

Total Sales to Dealers in Units (Thousands)	
1979	475
1980	805
1981	1,361
1982	2,035
1983 (proj.)	3,500
1984 (est.)	4,300

VIDEO DISC PLAYERS

Total Sales to Dealers in Units (Thousands)	
1980 (est.)	40
1981	157
1982	223
1983 (proj.)	350
1984 (est.)	500

VIDEO TAPE
(Blank)

Total Estimated Sales to Dealers in Units	
1980	15,000,000
1981	22,500,000
1982	28,000,000
1983	50,000,000
1984	70,000,000

VIDEO TAPE
(Prerecorded Only)

Total Estimated Sales to Dealers in Units	
1980	3,000,000
1981	5,500,000
1982	6,000,000
1983	8,000,000
1984	10,000,000

VIDEODISCS

Total Estimated Sales to Dealers in Units	
1980	300,000
1981	2,000,000
1982	5,000,000
1983	9,000,000
1984	13,000,000

VCR Sales to Dealers

Television Digest with Consumer Electronics
June 27, 1983 p9 Vol. 23 No. 26

	Sales to Dealers (units)	Average Price (FOB)	% Change	Gross Sales	% Change
1978	401,930	\$535.66		\$215,297,823	
1979	475,376	541.88	+1%	257,596,764	+19%
1980	804,663	520.36	-4%	418,979,977	+62%
1981	1,360,988	500.69	-4%	681,433,081	+63%
1982	2,034,797	419.19	-16%	852,966,554	+25%

Sales in 1978 Dollars

	Sales to Dealers (Units)	Consumer Price Index	Adjusted Average Price	% Change	Adjusted Gross Sales	% Change
1978	401,930	195.4	\$535.66		\$215,297,823	
1979	475,376	217.4	487.04	-9%	231,527,127	+8%
1980	804,663	260.5	390.32	-20%	314,076,062	+35%
1981	1,360,988	272.4	359.16	-8%	488,812,450	+56%
1982	2,034,797	288.6	283.82	-21%	577,516,084	+18%

U.S. Commerce Department Figures show that the average FOB price of video cassette recorders imported from Japan has dropped 33.5% in less than five years. This figure is somewhat distorted because higher priced professional models made up a greater percentage of the totals in the beginning than they do now.

TV Digest observes that:

"If the same drop is maintained for a full year, 1983's average price will end up at \$329. This certainly is a real possibility, all Japanese manufacturers are integrating and simplifying their product to take costs out. The year may end with a different product from the one it started with."



The Home Video & Cable Report

000057

Cable TV, pay TV, video tape, video disc, videotext, STV, MDS, LPTV.

Volume 13, No. 38

October 3, 1983

-3-

HVCR - October 3, 1983

HOME VIDEO MARKET INDICATORS, AS OF SEPT. 1, 1983

SEGMENT	JAN.	SEPT.	YEAR-TO-DATE		PENETRATION ¹
	1983	1983	GAIN	%GAIN	
Homes Passed by Cable	53.5 million	59.1 million	5.6 million	10.5%	70.4%
Basic Cable Subscribers	27.2 million	30.5 million	3.3 million	12.1%	36.3%
Pay Cable Subscribers ²	20.6 million	25.9 million	5.3 million	25.7%	30.9%
STV Subscribers	1.3 million	918,000	-442,000	-32.5%	1.1%
MDS Subscribers	795,000	660,000	-135,000	-17.0%	0.08%
VCR Unit Sales ³ (cumulative)	5.29 million	7.49 million	2.2 million	41.6%	8.9%
Video Disc Players (cumulative)	345,000	488,000	143,000	41.4%	0.05%
Two-way Cable Subscribers	185,000	250,000	65,000	35.1%	0.03%
Commercial Tele- text or Viewdata	64,600	108,000	43,400	67.2%	0.01%

¹Based on 83.9 million TV homes, derived from A.C. Nielsen Co. projections.

²Penetration estimate is based on 56% of basic cable subs (about 17.1 million homes) subscribing to one or more pay services.

³Sales to dealers, according to the Electronic Industries Association.

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KX-2501 A
PROFEEL
COMPONENT SYSTEM
• High quality 8" monitor
• Multiple video & audio
inputs & outputs
• Built-in stereo amplifier
\$969




JVC VHS
4 HEADS w/WIRELESS REMOTE
• 8 hour VHS
• 14 day program
• High speed search
• Still frame
• Electronic tuning
\$519




Panasonic CABLE READY
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synthesized tuning
• 21-day, 8 event prog.
LIGHTWEIGHT (3 lbs.)
Special Package Price! \$1399



Quasar CABLE READY
4-HEAD
w/REMOTE
• Electronic tuning
• 14 day prog. 2 event
• High speed search
• Still frame
• Front loading
Super Low Price! \$589




Panasonic LIGHTWEIGHT
PV-6600
4-HEAD w/STEREO
• 8-1/2 hour VHS
• Wireless remote
• 14 day program
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• Quartz tuning
• High speed search
• Slow motion
AUTOFOCUS
COLOR CAMERA
• Low light (20 foot)
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Special Package Price! \$1639



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