Local program origination by cable television stations must be considered as the next step in the development of the medium. Although the growth of local origination as a significant means of informing and entertaining people can be accelerated through creative, relevant, and participative programming, the spiral of increased revenues, broader programming, and more subscribers and viewers will still take time to reach substantial proportions—especially in the light of continued government restrictions. As proprietary CATV channel programming, leased channels, premium entertainment, and instructional programming increase, the variety of revenue sources to support such programming will also increase. Although these forms of revenue will surely increase over the next five to ten years, initially the local origination activity in any system should be geared to the expected near-term income and then expanded as additional revenues develop. (Author)
LOCAL ORIGINATION--THE FIRST STEP OF CATV'S SECOND GENERATION

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Over the years CATV has been profitable in those areas of the country needing improved signal quality and wanting a greater diversity of television programming. The industry pioneers of the 1950s and 1960s were selling access to improved television viewing and, in many respects, they could not have cared less about the actual viewing habits of their subscribers. Realizing that local and imported signals did not saturate the available channel capacity, some of the more innovative system operators gerry-rigged a rotating camera in front of a series of weather dials and a clock, which gave birth to the concept of locally-originated automated services. Live program origination was hatched when a select few system operators rotated the weather camera 180° to cablecast the local high school English teacher presenting his view of happenings in the community and announcing coming local events. With this, the CATV game was at least partially modified from only providing access to better and more diverse television programming to attracting a viewing audience from among the system subscribers.

As of early 1971, according to this year's TV Factbook, 524 systems or approximately 20 percent of all CATV systems were originating local programs, and 1,477 systems or 57 percent of all systems were providing automated services—primarily time and weather. This is almost a 90 percent increase in the number of systems providing live programming over the last two years, in spite of the confusion about equipment, the problems of regulations, and the resulting reluctance of the industry to initiate local programming.

It is interesting to note that about half of the 524 originating systems had fewer than 3,500 subscribers while the other half had more than 3,500 subscribers and were supposed to become a "significant means of local expression" by April 1, 1971. Of course, this mandatory requirement has been thrown into limbo by the Midwest Video decision stating that the FCC does not have the authority to require systems to originate. No matter what interpretations of this decision higher courts may give,
it is likely that the FCC will become more flexible in requiring systems to originate, considering such factors as the need for video expression in the area covered by the system and the state of development and financial resources of the individual system.

Even so, the CATV industry must realize that local origination is its "ace in the hole" for improving the regulatory environment, and the first fruit in the public cornucopia of services that has been described so often. These services include leased channels, premium entertainment and instructional programming at an additional fee—a form of pay TV, if you prefer—and two-way broadband home communication services.

Perspective on the expected evolution of CATV to full programming services can best be achieved by placing cable in the context of other media, from the printed word through motion pictures, radio, television, and, ultimately, cartridge television (or CTV). The principal ways that one medium differs from the others include:

- The ability of the viewer to select a title (program).
- The convenience of acquisition and use of the title.
- The degree of realism—resemblance to natural forms—of the presentation.

The cost of acquiring and presenting programming tends to increase with increased selectivity of titles, convenience of acquisition and use, and the degree of realism. For instance, the consumer was willing to pay the added price for broadcast television (i.e., investment in receiver and higher product prices) because the degree of realism was significantly greater than that of newspapers, magazines, and radio, and the convenience and selectivity of titles were greater than those available at local movie theaters. However, the new generation of young consumers and TV viewers has perhaps tired of the current fare on broadcast TV and is asking for increased selectivity, which can be provided by CATV with full-service programming but at an added cost.

Conventional local origination is the first step toward increased selectivity, and premium TV via the cable could eventually provide selectivity of feature films equivalent to that of the local theater and do it more conveniently and at a lower cost. CTV can provide even greater selectivity than that available via CATV, but the cost is greater and the convenience is less (assuming physical distribution of programming to the viewers). Cartridge television has yet to demonstrate that today's consumer—or even the 1975 consumer—is willing and able to pay the added
cost for this selectivity. However, just as broadcast television founded the market for CATV, the development of CATV could well be an intermediate step to wide program selectivity, which will finally evolve into significant sales of CTV units and programming in the 1980s.

Thus, the full development of local origination in CATV appears to be the next economically feasible step in the ever-expanding entertainment and information services provided by the media to an increasingly astute and affluent consumer.

One of the most significant attributes of CATV is its participative capability: the viewer can interact with the machine, whether in playing bingo, watching neighbors at the town council meeting, or viewing the children playing in a little league baseball game. The interaction can be repeated at several convenient times, and even some day with the magic of instant replay, economics permitting. In these initial years of local origination, this element of participation must be used to get the subscriber accustomed to tuning in the local origination channels and to considering these channels as a source of new types of programming.

Once audiences can be delivered to the local origination channels, the ever-accelerating spiral of increased revenues, broader programming, and more subscribers and viewers will have begun. From this, the demand for leased channels will emerge.

Special-interest groups will use leased channels as the soapbox in an "electronic Hyde Park"; enterprising program suppliers will lease channels for selected audiences; advertisers and merchandisers will lease channels to present newly developed special-interest programs on such topics as fishing or camping, complete with promotional material; the government will lease channels to present important information to the disadvantaged and other groups; and the nonprofit foundations will lease channels to experiment with new forms of educational and instructional programming.

Financially, one of the more significant developments for the system operator will be the leasing of channels for the presentation of premium entertainment and instructional programming for which the subscriber will pay additional fees. As we are all well aware, Gridtronics announced its special four-channel approach two years ago at the San Francisco NCTA Convention, but they have had difficulty securing feature films to serve as the anchor source of funds.

The funds required to develop premium programming on leased channels can come from many sources, depending on the nature of the programming
and the sponsoring organization. Programming developed by civic, religious, social, or political groups could be funded by donations and membership fees, which could often be solicited during the program. Merchandisers could fund this programming out of advertising budgets. Entrepreneurs, developing a special package of programs, could solicit advertisers having products that would appeal to specific segments of viewers. Programming directed at professional groups could be funded from two sources, provided the current FCC rule restricting advertising on pay channels is relaxed.

The first source of funds is the organizations that want to sell the products described (e.g., the drug manufacturer broadcasting to doctors). The second source is subscription fees from the preselected and restricted viewers seeking the information. Finally, mass-audience premium programming, such as movies and sporting events, could be subscriber-supported or advertiser-supported, depending on the drawing power of the event.

Even if advertising continues to be restricted on channels for which the viewer pays an additional per-channel or per-program fee, a more "subtle" form of advertising is likely to emerge as an integral part of the programming.

As with most of the significant developments that we have witnessed in this 20th century, it will take time to implement the scenario of development for CATV programming to deliver audiences who in turn will generate revenues and hence more varied programming. This scenario will be slowed even further, because the development of local origination must rely on the growth of CATV systems and increased CATV penetration in metropolitan areas, which has been encumbered by the uncertainty in government regulation. Although the use of significant amounts of money might have some influence on hastening the day when cablecasting reaches the take-off point on an economic growth curve, there is no guarantee. Perhaps one of the greatest impediments to the viability of cablecasting in the near term is that the subscribers are not accustomed to thinking of locally originated programming as good—and, in many instances, unique—source of entertainment, information, and instruction.

Local origination costs money and, being reasonable businessmen, CATV operators would like to increase their revenue to pay for it. As already indicated, the prospective sources of revenue include more subscribers, advertising, channel lease fees, and special subscriber fees.

On balance, a CATV system can expect to increase its subscribers by 10 percent, if it offers a reasonable series of automated local/live, and prerecorded programs. This increase in number represents an increase in potential monthly revenue of $500 per 1,000 subscribers in the system. Advertising revenues could be about $175 per 1,000 subscribers per month, assuming 20 hours of programs per week, eight minutes of advertising.
available per hour of programming, an advertising rate of $1.00 per 1,000 subscribers, and only 25 percent of the available minutes sold. The estimated advertising rate of $1.00 per commercial minute per 1,000 subscribers is a reasonable average in light of (1) the experience reported by systems currently accepting advertising, and (2) the cost of other media. Granted, some would argue—and we would agree—that the cost per 1,000 is not an appropriate way to sell CATV advertising; nonetheless, it provides a necessary basis for making estimates. Some programming on CATV—particularly unedited public-service programming—is not likely to deliver a large audience and will thus not attract significant advertising. On the other hand, some programs, such as local athletic events, will command a higher-than-average advertising rate.

Looking five years into the future, it is not improbable that monthly revenues from advertising could increase tenfold to $1,750 per 1,000 subscribers. This is based on the assumptions of 50 hours of programming per week, the same eight available minutes per program hour, an advertising rate of $2.00 per hour, and 50 percent of the available minutes sold. Thus, the substantial increase foreseen in advertising revenues results from the multiplicative effect of increased program hours, increased advertising rates, and a higher percentage of available minutes sold.

Looking at the expense side of the picture: monthly origination expenses currently vary from about $2,500 (plus a sales commission) for a modest $15,000 monochrome facility to over $9,000 (plus commission) for an $80,000 color studio (both include depreciation of equipment).

If the current revenue is estimated at $675 per 1,000 subscribers—$500 for increased subscribers and $175 from advertising—it would take a 3,700-subscriber system to break even if a mundane origination facility were used, and over 13,000 subscribers to break even if a color facility were used.

However, let’s once again look five years out and assume the revenues from origination are $2,250 per 1,000 subscribers—$1,750 from advertising and $500 from additional subscribers. Systems having just over 1,100 subscribers could afford a modest monochrome facility, and a 4,000-subscriber system could afford a color studio.

These estimates raise several points, the most obvious of which is that the CATV operator contemplating local origination should first assess the expected increase in subscribers and advertising revenue that can be derived through local origination. Then, the operating expenses should be geared to the expected monthly revenue. The facilities could well be
modest at first and upgraded as the subscribers, hours viewed, and resulting revenues increase.

Let's extrapolate system revenues into total industry revenues from increased subscribers and advertising, as well as the prospective revenues from channel leasing and additional subscriber fees from premium entertainment and instructional programming. Projections by SRI indicate that the revenues resulting from local origination activities could increase from less than $10 million in 1970 to over $90 million in 1973, over $350 million in 1976, and almost $2 billion by 1981. Explosive growth? You bet! However, it's not unlike the growth that occurred in television revenues after the freeze was lifted in the early 1950s. And television revenues grew strictly from advertising. In CATV, multiple sources of revenue are available. In fact, by 1981, less than 50 percent of the revenues would come from advertising, about 20 percent each from subscribers who would not otherwise subscribe to CATV and from added fees for access to special programs or special channels, and over 10 percent from channel leasing.

Let me briefly justify these projections. The expected advertising expenditure is predicted on an extrapolation of the previously identified advertising revenue per 1,000 subscribers to the approximately 26 million subscribers that are expected to be on the cable in 1981. An advertising expenditure of slightly under $1 billion in CATV by 1981 appears reasonable on several counts. First of all, it represents less than 3 percent of the $37 billion expected to be spent annually on advertising in the early 1980s. If the CATV industry cannot do at least that well in local, cooperative, regional, and national advertising, something is wrong.

Second, this advertising expenditure can be viewed on a per-household basis. At present, total advertising expenditures are equivalent to about $350 per household; newspapers account for $100; television for over $60, and radio and magazines each for about $25 per household. By 1981 total advertising expenditure is expected to be over $500 per household, with newspapers accounting for $150, television for over $100, and radio and magazines each for over $50 per household. The SRI projection of CATV advertising revenue would represent only $13 per household based on 76 million U.S. households, or $36 per CATV household. This is reasonable in light of the fact that television advertising expenditures increased over tenfold between 1949 and 1955, from $1.50 to $20 per U.S. household.

The revenue derived from the incremental increase in subscribers is based on the assumption that only 2 percent of the households currently subscribing to CATV do so because of local origination, but by the early 1980s this number will increase to 20 percent.
The estimate of revenues from additional per-channel or per-program subscriber fees is based on the assumption that by 1981, 30 percent of the CATV households will subscribe to these additional services and that they will pay an additional monthly fee of $5.00.

The assumptions behind the projection of leased channel revenues are more complex. First, it is assumed that the daily number of leased hours will increase from 6 in 1973 to 12 in 1976 and to 24 in 1981. Note that we are considering access once again, not the need to deliver audience on these leased channels. These hours could run simultaneously on numerous channels or sequentially on fewer channels. The hourly charge for a leased channel is estimated at 0.1 cent per subscriber, or $1.00 per 1,000.

The estimate of 0.1 cent per subscriber-hour could well be conservative, considering the following:

- If an advertiser were charged an equivalent of 0.8 cent per subscriber-hour, the charge of 0.1 cent just to reach the subscriber leaves an adequate sum for programming.

- It has been estimated that the cost to place external programming on the air is about $15 per hour. Assuming a 5,000-subscriber system, that's about 0.3 cent per subscriber hour.

- The cost to rent a local meeting hall is at least 3 cents per user-hour.

- Finally, there is the question of providing access at a reasonable cost to anyone who wants to lease a channel. At 0.1 cent per subscriber-hour, the lessee could have access to 15,000 subscribers for a cost of only $15 per hour and, even if only half of one percent of the subscribers (75 people) watched a specific channel, it would be cheaper and more convenient than requiring people to leave their homes and travel to a central meeting location.

There is another area of potential revenue which I have not discussed, and that is program production services. Although the program production function is likely to become totally separated from the program distribution or traditional CATV business, the advent of leased channels will require that the special-interest groups using CATV or any other non-broadcast video medium be given assistance in program production. The industry is in a good position to provide these services.
In summary, local program origination must be considered as the next step in the development of the medium. Although the growth of local origination as a significant means of informing and entertaining people can be accelerated through creative, relevant, and participative programming, the spiral of increased revenues, broader programming, and more subscribers and viewers will still take time to reach substantial proportions—especially in light of continued government restrictions. As proprietary CATV channel programming, leased channels, and premium entertainment and instructional programming increase, the variety of revenue sources to support such programming will also increase. Although these various forms of revenue will surely increase over the next five to ten years, initially the local origination activity in any system should be geared to the expected near-term income and then expanded as additional revenues develop.