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Videotex presentation for the
Department of External Affairs
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**Reymer & Gersin
Associates, Inc.**

VIDEOTEX PRESENTATION

for

**DEPARTMENT OF EXTERNAL AFFAIRS
CANADA**

by

Jonathan Beacher
Senior Vice President

LIBRARY DEPT. OF EXTERNAL AFFAIRS
MINISTÈRE DES AFFAIRES ÉTRANGÈRES

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Jonathan Beacher is Senior Vice President of Reymer & Gersin Associates, a 110-person marketing research firm that specializes in researching electronic media and telecommunications.

His firm has probably conducted more primary research on home information services than any other, having interviewed over 30,000 people on behalf of fifty-seven clients, including AT&T, Bank of America, CBS, Centel, Chemical Bank, Citibank, Comsat, Knight-Ridder, Times-Mirror, Southern New England Telephone, and many others. Most of the research the firm does is for the proprietary use of an individual client.

Among the videotex projects they've conducted are: researching Miami subscribers to Viewtron, the nation's first consumer videotex service; developing the first NAPLPS business videotex service, VideoLog; and studying over 6000 peoples' reactions to purchasing videotex in the National Electronic Home Services Test.

Jonathan began researching videotex six years ago, while serving as Vice President of Marketing for Gannett's broadcast division. Prior to that, he worked for Cosmos Broadcasting, and three advertising agencies. He was graduated in 1971 from Michigan State University with a degree in telecommunications.

SELECTED FINDINGS

FROM

**THE NATIONAL ELECTRONIC HOME
SERVICES TEST**

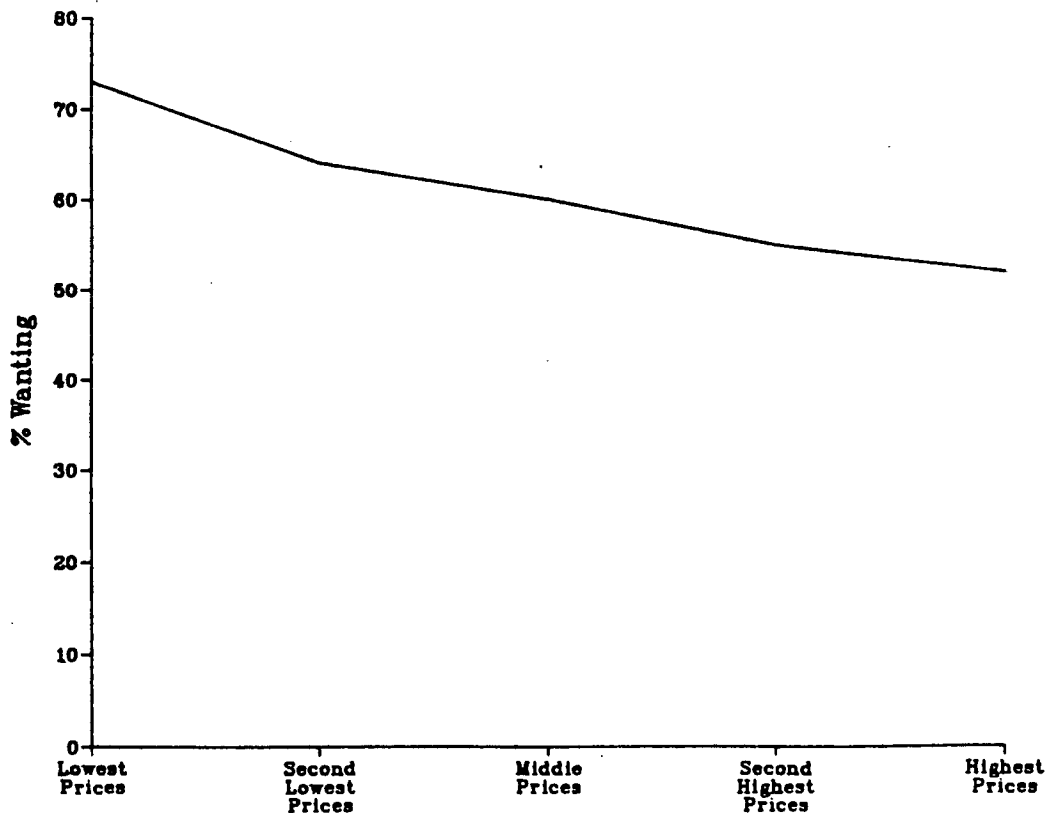
How Do Consumers React To Videotex?

Most often, concepts about new products or services get only mild interest from consumers. In research, it is not unusual to find only a minority wanting videocassette recorders, home computers, or new kinds of pay cable TV services. But this is not the case with videotex.

Although NEHST gives consumers only a brief demonstration of videotex, most of them quickly grasp the benefits of having this new service. In fact, they react to videotex much like they did to TV when it was first introduced over thirty years ago. A majority of people want it.

The acceptance is so favorable that it appears videotex has the potential to become a "must have" in most households. Just as most people pay for telephones, TV's, stereos, refrigerators, and stoves, so too are they willing to pay for videotex.

How many people are willing to pay for a control unit in order to receive videotex services? The percentage varies among the five NEHST sample groups, as shown in Figure 1. Among the group shown the lowest prices for videotex controls and services, when all services are offered for free, 73% are willing to buy or rent a unit to get services. And even among the group shown the highest prices, when most services cost \$16 each per month, 52% want videotex.



POTENTIAL VIDEOTEX MARKET

(Number of Respondents = 6197)	PERCENT
<u>Knowing the prices for the videotex hardware and services ...</u>	
I will get videotex	67%
Early	29%
I'll be one of the first	11%
I'll get videotex after a few people buy it	18
Later	38
I'll get videotex after I see a lot of people buying it	23
I'll get videotex after I see most people buying it	15
I will not get it	32
No answer	1

Which Videotex Services Do People Want?

In the NEHST questionnaire, consumers indicate the services they'd like to have in their homes. They can choose shopping at home, shopping guides, banking at home, electronic mail, and an information service about a particular topic of special interest. They can also choose either **one** of the two news services offered: news with intrusive ads mixed among the information pages, or news with no advertising. All together, they can pick six services, getting only one, or selecting their own bundle of services.

How many people get each service? The answer varies among the five NEHST sample groups, because each group is shown different prices for the same services. By comparing reactions among the five groups, the effect price has on the demand for services is seen. To refresh your memory, here's a summary of the various prices for services in each of the five groups:

Group shown lowest prices

All services are absolutely **free of charge**.

Group shown second lowest prices

Four pay services - banking at home, the special interest information service, electronic mail, and a news service consisting of all information **without** intrusive ads - are priced at \$4 per month each. A news service **with** intrusive ads is 25% less than the ad-free service - \$3 a month. Two other services - shopping guides and shopping at home - are offered for free, since most videotex providers expect these services to be totally supported by advertising or purchase transaction revenues rather than subscription fees.

Group shown middle prices

All pay services are priced at \$8 each, except the news service with advertising which is discounted to \$6. Shopping guides and shopping at home are free.

Group shown second highest prices

All pay services are priced at \$12 each, except the news service with advertising which is discounted to \$9. Shopping guides and shopping at home are free.

Group shown highest prices

All pay services are priced at \$16 each, except the news service with advertising which is discounted to \$12. Shopping guides and shopping at home are free.

Naturally, more people get each service when it's free than when it's priced high:

Among NEHST sample group shown the...

<u>Percentage getting service</u>	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Middle prices</u>	<u>Second highest prices</u>	<u>Highest prices</u>
<u>Pay services</u>					
News service	64%	43%	37%	32%	26%
with ads	27%	22%	23%	24%	19%
without ads	37	21	14	8	7
Banking at home	55	39	32	28	24
Special interest service	50	24	20	15	13
Electronic mail	31	16	13	11	8
<u>Free services</u>					
Shopping guide	62%	54%	51%	46%	45%
Shopping at home	47	48	46	42	42

Overall, shopping guides and shopping at home are chosen by the most consumers because these two services are always offered for **free** among all NEHST sample groups. Hence, demand for these services doesn't drop as much among the groups exposed to higher prices for other services.

Among the services that a monthly fee is charged for, the **news service and banking at home** are much more popular than the special interest service or electronic mail. All four pay services show a large decline in demand among groups exposed to the higher prices. (A discussion of consumer reactions to each service begins on page 46.)

**Total Amount
Consumers Spend**

The number of services people choose translates, of course, into the amount of money they'll pay for videotex. Adding up the cost of the services people choose, we see the following:

Among NEHST sample group shown the...

<u>Total amount spent on services</u>	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Middle prices</u>	<u>Second highest prices</u>	<u>Highest prices</u>
\$8 or less	-%	41%	20%	-%	-%
\$9 - \$16	-	18	22	20	22
\$17 - \$24	-	-	9	18	-
\$25 or more	-	-	3	9	22
Get only free services	72	3	5	6	7
Don't get any services	28	38	41	47	49
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Among the NEHST sample group offered all services for free, no one spends any money, of course. Most of the market - 72% - wants "free" videotex, while 28% don't.

Among the group in the second column, most - 41% - spend \$8 a month or less on services. Only 18% spend \$9 or more. This is because most people want only one or two pay services, despite the fact that most services cost only \$4 each. The low price simply doesn't entice people to buy three or four. The message here for the videotex provider is quite clear - a low price per service doesn't make people spend much per month!

Things look better among the group in the third column. Offered most pay services for \$8 each, they split into several groups: 20% spend \$8 by getting one pay service, but 22% spend \$9-\$16 by getting two pay services. An additional 9% spend \$17-\$24 by buying three pay services, and 3% spend \$25 or more.

Raising the pay service price to \$12 in the column four group improves the situation again. Now 20% of the market spends \$9-\$16, 18% spends \$17-\$24, and 9% spend \$25 or more.

Finally, when pay services are \$16 each in column five, this group splits two ways: 22% spend \$9-\$16, and 22% spend \$25 or more.

In summary, at any given price, most people who buy videotex fall into two categories: they either buy a single pay service, or they buy two or more. Few select only the free services. Lowering the price doesn't change this pattern - it simply doesn't cause many more people to buy additional services. Therefore, charging higher prices makes more people spend more money for videotex.

**Does Offering The Market A
Fixed Bundle Of Services Increase Revenues?**

We've seen how the research suggests that charging higher prices causes consumers to spend more on videotex. Can consumers be forced to spend more if the only way they can get any videotex services is to buy several of them?

What if a videotex provider doesn't allow people to choose the number of services they want? What if videotex is offered only in a fixed bundle, or package, of services?

Will this strategy force people who ordinarily buy only one service to instead buy many, and therefore result in increased revenues?

Insight is provided by NEHST, which tests interest in buying videotex services in several ways. In one section of the questionnaire, people are offered services unbundled - that is, they can buy one, two, or as many as they wish, creating their own combinations.

In another questionnaire section, no choice is offered. Consumers are told the only way to get any videotex service is to buy a fixed **bundled** package of services consisting of:

- Banking at home
- News service (with ads)
- Shopping at home
- Shopping guide
- Rental of a videotex keypad control unit

All of this is offered for one flat monthly fee. The cost of the bundle varies among the five NEHST sample groups:

Group shown lowest prices - \$4 a month

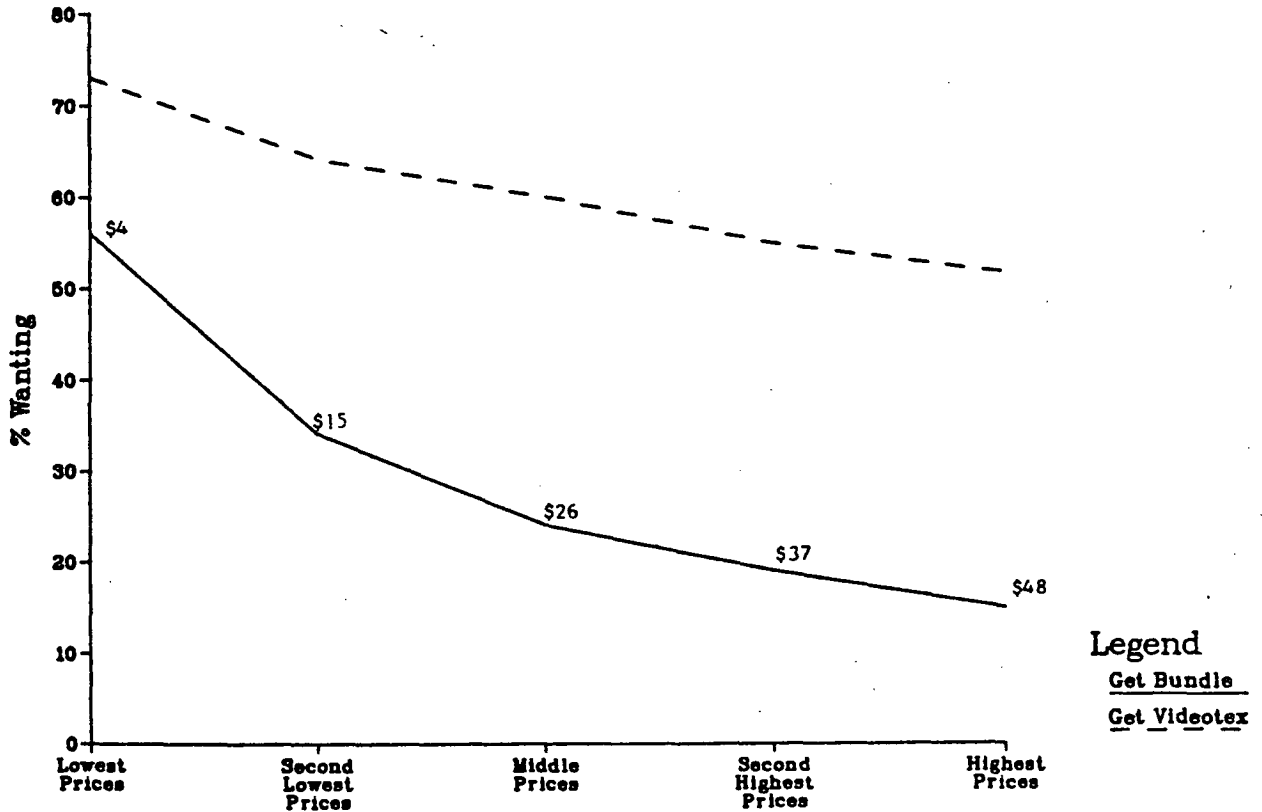
Group shown second lowest prices - \$15 a month

Group shown middle prices - \$26 a month

Group shown second highest prices - \$37 a month

Group shown highest prices - \$48 a month

Naturally, people are more likely to buy the bundle of services among the group shown the lowest prices than among those shown the higher prices, as shown by the solid line in Figure 7. Also notice how few people buy the bundle compared to the total who buy videotex when they can choose their own combination of services. Of course, not everyone willing to get videotex is willing to buy the fixed bundle.



Why do some people reject the bundle? Some show a strong disliking for one or more of the services offered. For example, some of those willing to buy a news service strongly dislike banking at home, and therefore reject a bundle containing banking as well as news. Still others dislike the idea of renting a control unit, preferring to buy one instead.

But price seems to be the biggest barrier. Those rejecting the bundle are those not willing to spend that much per month on videotex.

To illustrate, consider reactions among one of the five NEHST sample groups - the group exposed to the highest prices tested for videotex. (For them, the unbundled individual services cost \$16 each, except news with ads costs \$12. The bundle costs \$48, consisting of \$20 for renting a control unit plus \$28 for two pay services - \$16 for banking at home and \$12 for news with ads. Also included in the bundle are the two free services, shopping at home and shopping guides.)

At these prices, those getting videotex fall into two groups as follows:

37% won't buy the fixed bundle. They will only get services when offered unbundled, and they can choose their own combination.

15% will buy the fixed bundle of services. Of course, they'll also buy services when offered unbundled.

52% total getting services

So if a videotex provider only offers the fixed bundle of services, only 15% will buy. On the other hand, if services are offered unbundled, all 52% will buy.

Let's translate these figures into the revenue the videotex provider earns. If services are offered only in a fixed bundle, only 15% will spend \$28 for services (the bundle includes \$16 for banking plus \$12 for news with ads.) This means out of every 100 households in the market, 15 will spend \$28, generating \$420 in service revenues ($15 \times \$28 = \420).

A surprising finding is this same 15% of households actually spend more than \$28 each when they are offered services unbundled and are asked to choose their own combination! On their own, they spend an average of \$29 per household and generate \$435 in service revenues ($15 \times \$29 = \435). The bundle, then, does not force them to spend more than they are already willing to spend.

In fact, it makes them spend a little less!

When services are offered unbundled, the additional 37% of the market is willing to buy one or more videotex services. This group spends an average of \$18 per household, generating \$666 in service revenues ($37 \times \$18 = \666).

All together, offering unbundled services results in \$1101 in service revenues per hundred households in the market ($\$435 + \$666 = \$1101$). This compares to only \$420 when only the fixed bundle is offered.

This example makes two points evident:

- * Much more revenue is generated by offering services unbundled.
- * The people willing to buy the fixed bundle are those who are willing to spend that much or more when choosing individual services on their own. The bundle doesn't force them to spend any more than they are already willing to. In fact, they spend more when left to choose their own combination of services.

These findings hold true when examining the other NEHST sample groups exposed to lower prices for the services and the fixed bundle. For example, when services are \$3-4 each and the bundle is \$15, offering only the fixed bundle results in \$238 in service revenues for each 100 households in the market, compared to \$471 in revenues when offering services unbundled.

The Mix Of Services Chosen

We've seen that offering consumers a fixed bundle of services consisting of banking at home, news without ads, shopping guides and shopping at home has only limited appeal.

Perhaps there is some "magic" combination of services that works better? If so, this certainly will make life easy for the service provider!

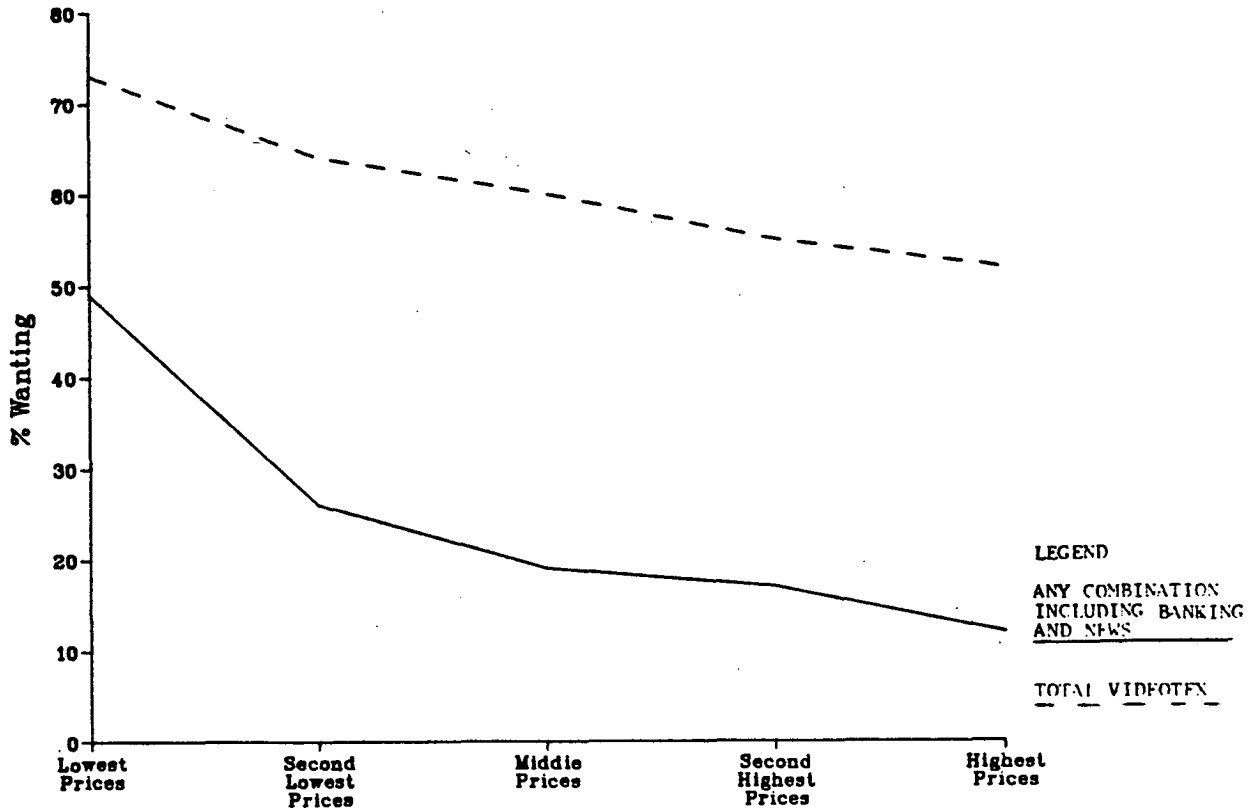
But unfortunately, NEHST shows there is no "magic" combination of services that appeals to many people. When left to choose their own combinations, NEHST consumers make up 92 different combinations, and the most popular one appeals to only 5% of the market.

Several factors cause this to happen. For one, price causes many consumers to assemble a service package they can afford. Some people can only afford one service, while others can afford many. Therefore, no one offering can appeal to everyone.

The diversity in the service mix that consumers want is created by their differences in opinions regarding the services. As shown in the NEHST Segmentation Analysis, some people like certain services and dislike others. This is only natural, because the services offered are vastly different in the functions they serve. Banking at home is very different from electronic mail, or an information service. It's not surprising, then, to expect different people to react differently to them.

Accordingly, there is always a limited number of people who will be willing to buy any combination of services.

Take the number of people in the market with a desire for banking at home as well as any news service, either with or without ads. How many people choose any combination of two or more services that includes at least home banking and any news? Figure 8 shows the answer:



As you can see, few people on their own choose any service combination including home banking and news. It appears except at the lowest price levels, the natural market for a banking and news combination is small - much smaller than the market for videotex as a whole.

Pricing Strategies For Optimizing Videotex Revenues

So far, we've seen that many consumers want to buy more than one videotex pay service, yet there's no combination of services appealing to a large segment of the market. Offering only a fixed bundle of services therefore results in greatly reduced revenue potential.

The research suggests revenues will be increased by offering consumers a number of services to choose from, and allowing them the freedom to pick the exact combination of services they prefer.

But what's the optimal price to charge for services?

The Magic Price For Combinations Of Services

Let's recall the number of people willing to buy any combination that includes at least banking at home plus any one of the news services.

As we saw earlier in Figure 8, the combination of banking at home bought in conjunction with a news service is chosen by 49% of the market when it's offered for free. But only 26% purchase when this combination costs \$7-8 (\$7 if the news service has intrusive ads, or \$8 if the news has no ads.) At \$14-16, only 19% want it. Only 17% buy when it's \$21-24. And at \$28-32, a mere 12% purchase.

These figures suggest that a company launching a videotex banking and news service at \$28-32 a month may encounter difficulty in penetrating more than 12% of the market.

Would it do better to lower the price? Yes! At \$21-\$24 a month, more people buy, resulting in greater revenues (number of people times the amount they'll pay) than obtained at the higher \$28-32 price. Lowering the price to \$14-16, however, hardly increases demand at all. Only 19% buy, compared to 17% at the \$21-24 price. Dropping the price even further to \$7-8 raises demand to only 26%, resulting in even less revenue.

Therefore, it's clear that maximum revenue for a banking and news combination is reached by charging the \$21-24 fee, rather than \$28-32 or \$14-16. This holds true for most other combinations of services.

To the consumer, videotex seems to be worth about \$24 a month. Thus, people will buy two \$12 services totaling \$24. But they shy away from two \$16 services for \$32.

This "magic" price level of about \$24 is a mental roadblock in consumers' minds. Charging more results in the laws of diminishing returns, reducing the potential for videotex revenues.

The Best Marketing Strategy

We've seen that revenue is maximized by getting about \$24 per household. But this can't be done by offering a fixed package of services. Too many potential subscribers won't purchase a fixed bundle, because there's no combination of services appealing to the majority.

To give consumers the opportunity to choose their own combinations of services, yet insure the provider of about \$24 a month, the best strategy may be to offer consumers a number of low-priced services to choose from - perhaps at \$12 each - with the provision that in order to get any, they must choose at least two.

"We've got six different services to choose from," the pitch might go. "They're each \$12 a month. Which two or three would you like to have?"

Of course, this strategy applies only to videotex providers looking to maximize revenues from subscription fees. Others may have a different goal, such as gaining maximum advertising revenues as well as subscription fees. Some industry participants estimate they can receive \$20-\$30 per month in advertising revenues for each subscriber on the system. In that case, it may be wiser to lower subscription fees to entice more consumers to subscribe, and therefore make the system a more efficient advertising medium. The extra ad revenue gained may offset the loss in subscription fees. (See page 54 for a discussion of advertising revenues versus subscription fees for a news information service.)

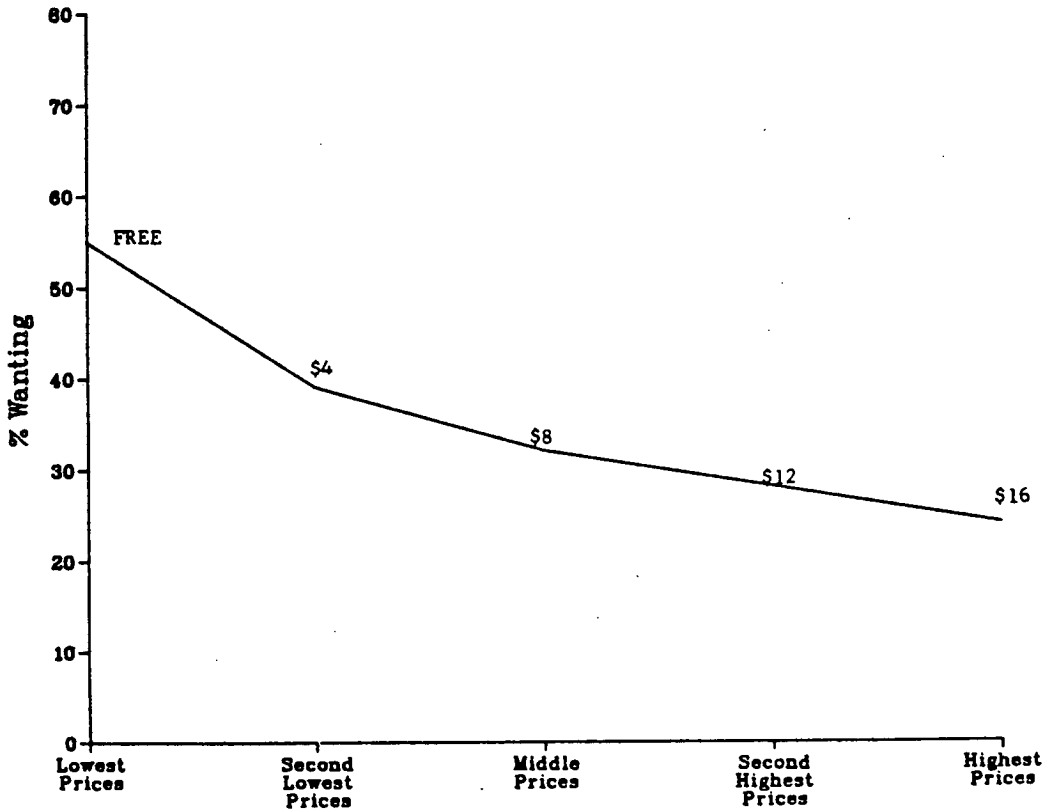
USEFULNESS OF SERVICES[†]

How useful would this service be to you?	This service is ...		
	HIGHLY USEFUL	MODERATELY USEFUL	NOT USEFUL
(Number of Respondents = 6197)			
Banking at home	42%	29%	29%
Shopping guide pages showing bargains in local stores	39	42	19
News, weather and sports	30	52	18
Shopping at home	30	41	29
Information about my special interest	23	52	25
Electronic mail	15	32	53

[†]"Highly Useful" includes respondents who said the service would be very useful or extremely useful. "Moderately Useful" includes respondents who said the service would be somewhat useful or slightly useful. "Not Useful" includes respondents who said the service would not be that useful or not at all useful.

Overall Demand For Banking At Home

NEHST demonstrates banking at home as a service enabling consumers to use a videotex-equipped TV to pay bills electronically and to see checking, savings, and charge account balance statements. Figure 14 shows the percentage of people buying this service among the five NEHST sample groups exposed to different prices for home banking.

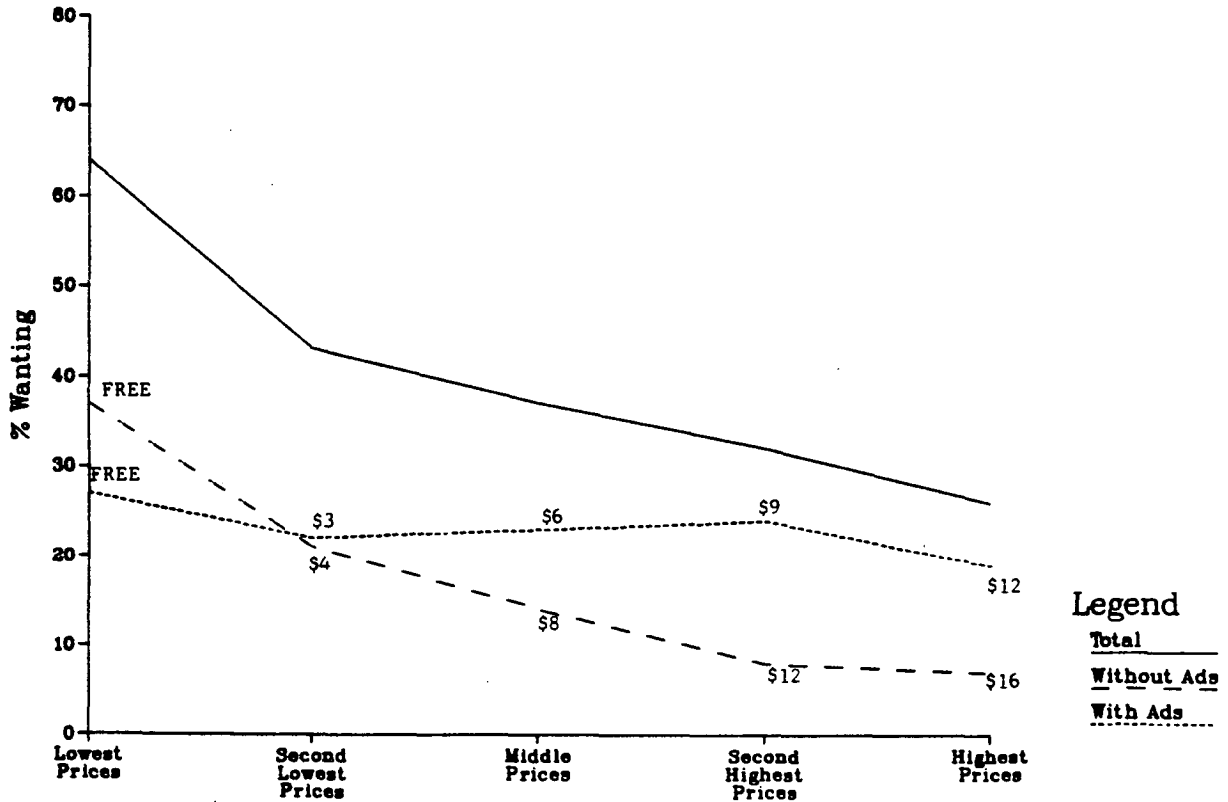


As you can see, demand for home banking is strong, even among those exposed to a \$16 per month fee for the service.

**Overall Demand For
News, Weather, Sports Service**

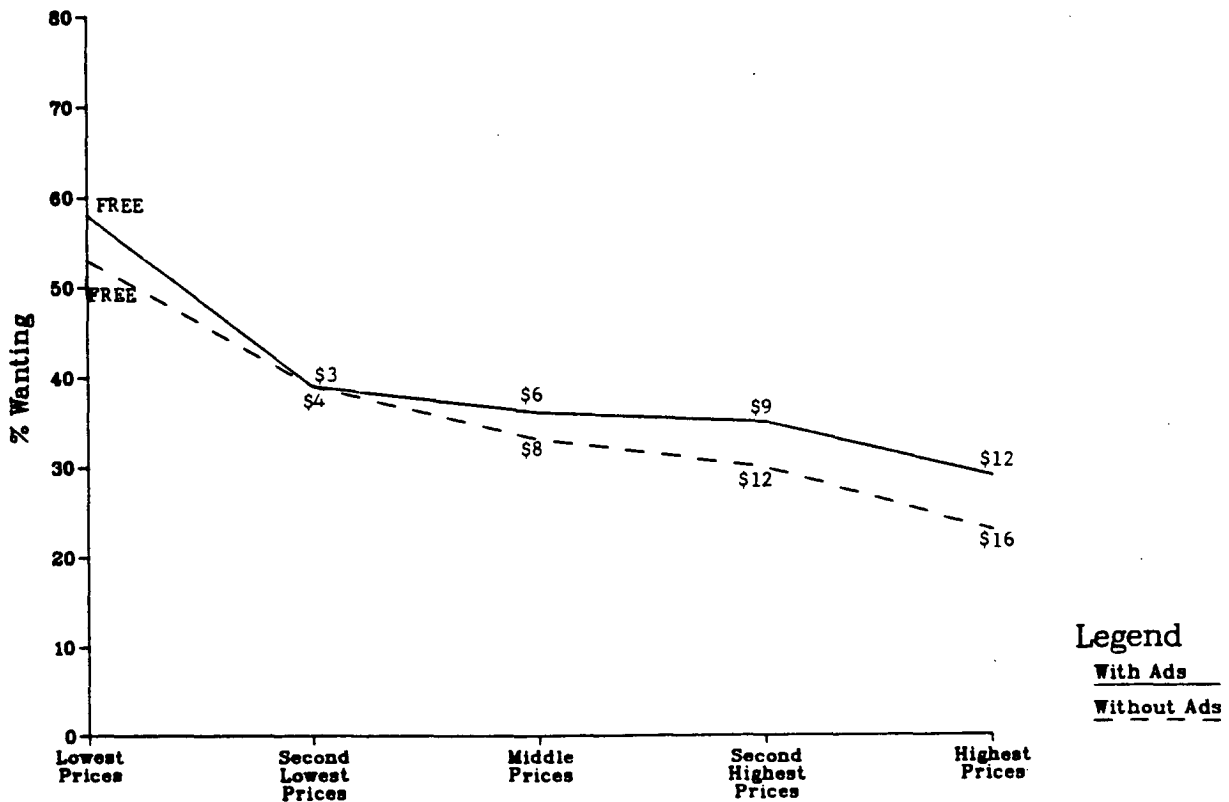
NEHST demonstrates an electronic news, weather, and sports service allowing consumers to use a videotex-equipped TV to call up pages of information, much like that in a regular newspaper. Consumers have two ways to receive this service: with no advertising, or with intrusive ads appearing at random among the information pages. Consumers can subscribe to the service with ads for 25% less than the service with no ads.

How willing are consumers to buy either service? Figure 9 shows the percentage of people buying the news service without ads (dashed line) compared to the the news service with ads (dotted line) among the five NEHST sample groups, each exposed to different prices for the news services. **Consumers can only buy without ads, or with ads, but not both.** The solid line is the total demand for both added together.



Overall, consumers prefer the news service with ads, choosing to accept intrusive ads in exchange for a 25% reduction in subscription costs. Both services tie in popularity when without ads costs \$4, and with ads is \$3. News without ads is more popular only when both services are free. But even when both are free, many people still want the service with ads.

Figure 9 shows which of the two services consumers prefer. However they aren't adamant about their preferences. When asked if they'd buy the service without ads if it is the only one available, almost everyone wanting either kind of news service gets the ad-free service, as shown by the dotted line in Figure 10. And almost as many people get the service with ads when it's the only service available, as shown by the solid line.



Both curves are almost the same as the total demand curve for news in Figure 9 on the preceding page. It appears demand for a news service is constant, regardless of whether the service is offered with or without ads, or whether a 25% discount is offered for the service with ads.

In short, the research suggests an information provider can offer news with intrusive ads at the full price, and demand will be the same!

What Kinds Of Information Do Consumers Prefer?

What topics do consumers want a videotex information service to provide? NEHST asks people to indicate their interest in receiving videotex information pages about a variety of subjects.

The following table shows the percentage of consumers who are willing to get a videotex news service and are interested in each topic.

Naturally, this percentage varies among each of the five NEHST sample groups. Among those groups shown higher prices, fewer people are willing to get the news service, and therefore fewer are interested in information topics. For instance, the first line of the following table shows that when the news service is free, 50% of the market will subscribe and are interested in a calendar of things to do. But at the highest prices tested - when news costs \$16 a month without ads, or \$12 a month with ads - only 21% of the market will subscribe and shows interest in this topic.

	<u>Lowest Prices</u>	<u>Second Lowest Prices</u>	<u>Middle Prices</u>	<u>Second Highest Prices</u>	<u>Highest Prices</u>
Local weather	61%	41%	34%	30%	25%
World news	57	39	32	27	23
Consumer product ratings	57	38	31	28	23
Medical/Emergency advice	56	38	32	28	24
Emergency phone numbers	55	38	31	27	23
Scientific developments	53	35	29	26	21
Economic outlook	51	34	28	25	21
Calendar of things to do	50	34	28	26	21
Movie reviews/Listings	50	33	28	24	21
TV schedules	50	34	26	24	19
Travel/Sightseeing	50	33	27	25	21
Home improvement	49	34	26	25	20
TV reviews and news	49	34	26	23	20
Arms race, defense	49	34	29	25	21
Energy crisis	49	32	26	23	20
Health/Nutrition tips	49	32	24	23	18
Managing your money	48	33	27	27	20
Dealing with inflation	47	33	25	25	20
Tax tips	47	32	26	23	19
Legal advice	46	32	26	23	19
Gardening/Indoor plants	45	28	24	22	17
Your business	45	28	25	22	19
Crime	44	31	24	21	19
Local government	44	31	25	22	17
U.S. Congress & Senate	44	30	24	22	18
Exercising	43	29	23	21	18
Current interest rates	42	27	23	21	18
People in the news	42	28	23	20	17
Professional sports	42	30	25	23	20

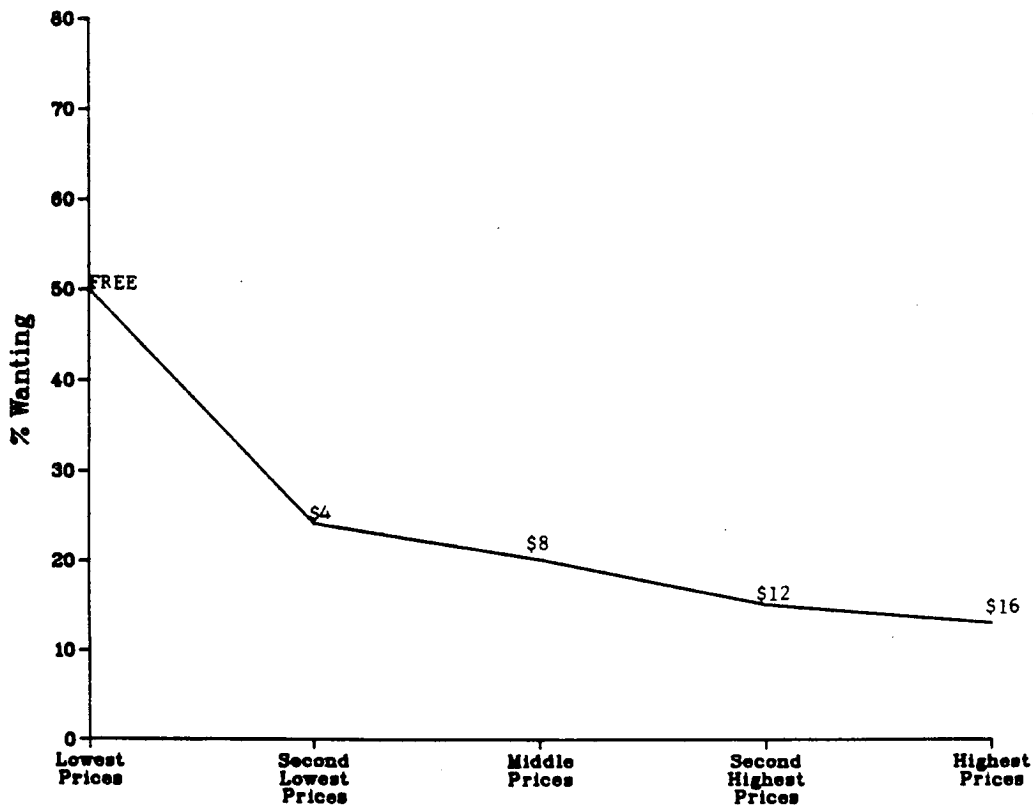
	<u>Lowest Prices</u>	<u>Second Lowest Prices</u>	<u>Middle Prices</u>	<u>Second Highest Prices</u>	<u>Highest Prices</u>
State government	42	28	24	21	17
Encyclopedias	41	25	20	19	15
Football news	41	30	25	23	20
Homemaking tips	41	27	19	18	15
Recipes/Cooking	41	28	23	21	18
Restaurant reviews	41	27	20	20	16
Home decorating	40	28	20	20	17
Live theatre reviews	40	25	20	18	16
Weather in other cities	40	28	22	20	16
Election campaigns	39	27	22	20	17
Auto repair	38	26	20	18	16
Business, Wall Street	38	25	20	19	16
Food calorie charts	38	23	18	17	13
Government agency listings	38	25	21	19	15
Handicrafts	37	23	19	15	13
Crossword puzzles	36	23	18	17	15
Local schools	36	24	18	17	13
Rush hour traffic info	36	23	20	18	15
Almanac of records, etc.	35	23	20	17	15
Book reviews	35	23	19	16	14
Personal computers	33	23	20	17	15
Camping/Hiking	32	19	16	17	13
Baseball news	31	23	18	18	15
Women's rights and roles	31	21	17	16	14
News for children	31	19	17	14	12
Photography	31	21	17	15	13
Bond/Commodity prices	30	19	16	15	12
College sports	29	20	17	14	13
Fashion trends	29	19	15	14	13
Science fiction stories	29	20	16	15	13
Calendar of meetings	28	18	15	14	11
Career guidance	28	17	14	11	10
Games (chess, checkers)	28	18	14	14	12
Jokes of the day	28	21	15	14	10
Famous celebrities	27	20	14	13	12
Airline schedules	26	16	14	12	11
Child-rearing tips	26	17	14	11	11
Classical music	26	15	13	12	9
Basketball news	25	19	15	15	12
Country music	25	17	13	12	10
Fishing	25	16	14	12	10
Needlework/Sewing	25	16	13	11	10
Stock market prices	25	17	15	13	10
Art (paintings, museums)	24	15	13	10	10
Bus/Transit schedules	24	14	12	11	9
Dancing	23	17	12	12	12
Religion	23	16	13	10	9
Children's activities	22	14	11	10	8
Rock music	20	13	13	11	10
Collecting (stamps, etc.)	19	12	10	10	8
Horoscopes	19	14	11	9	8

	<u>Lowest Prices</u>	<u>Second Lowest Prices</u>	<u>Middle Prices</u>	<u>Second Highest Prices</u>	<u>Highest Prices</u>
Labor unions	19	12	10	8	8
Wine reviews	19	14	11	8	9
Jogging	18	11	8	10	8
Personal advice	18	13	8	9	7
Playing baseball	18	14	11	11	8
Boating, tide information	17	10	8	8	9
Golf news	17	12	10	9	8
Tennis news	17	13	9	8	7
Bicycling	16	10	8	8	7
Family planning advice	16	9	9	8	8
High school sports	16	12	9	9	8
Golf tips	15	10	9	8	8
Hockey news	15	11	8	9	8
Snow skiing	15	10	9	7	7
Tennis tips	14	11	7	7	7
Bowling	13	9	8	7	5
Ballet	12	8	6	5	6
Hunting	12	9	9	8	7
Racquetball/Handball	12	9	8	7	7
Sports betting odds	12	10	8	7	6
Wagering/Betting	12	11	9	7	6
Clubs (Elks, garden, etc.)	11	7	5	6	5

Overall Demand For Special Interest Information

NEHST demonstrates a special interest information service allowing consumers to get pages of information about a particular topic, such as a hobby, business, etc. "In a sense, it's like receiving an electronically-delivered magazine," the demonstration states.

Figure 12 shows how consumer interest in receiving a special information service varies among the five NEHST sample groups exposed to different prices for the service, ranging from "free" to \$16 month.

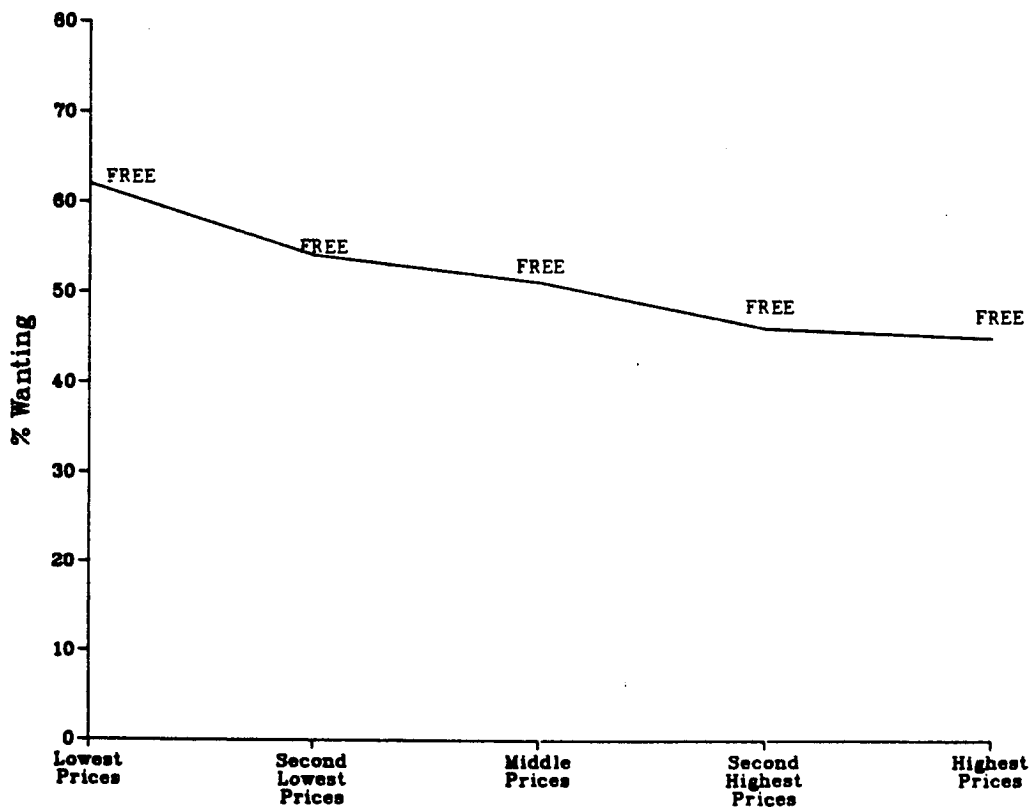


Overall Demand For Shopping Guides

NEHST demonstrates a shopping guide service allowing consumers to use a videotex-equipped TV to retrieve pages of advertisements, organized by categories. In a sense, it's an electronic Yellow Pages that does everything the printed Yellow Pages does and more - it allows one to see price-and-item ads that can be continuously updated, minute by minute. Using it, a consumer looking for a coat can push buttons to instantly find ads about merchants offering coats at sale prices.

Shopping guides are a free service offered to all NEHST sample groups. There's no monthly fee for using the service, since it's an advertiser-supported medium.

Almost everyone wanting some form of videotex service wants shopping guides, as shown in Figure 21:



**The Kinds Of
Shopping Guides Wanted Most**

What types of shopping guides are most popular with consumers?

The table below shows the percentage of the market that is willing to get shopping guides and is interested in each of the kinds of shopping guide information shown:

	<u>Lowest Prices</u>	<u>Second Lowest Prices</u>	<u>Middle Prices</u>	<u>Second Highest Prices</u>	<u>Highest Prices</u>
Supermarkets	56	48	45	40	37
Restaurant specials	50	43	40	36	32
Clothing stores	49	41	38	34	33
Theatre/Movie listings	49	42	40	35	34
Gift ideas	45	40	36	33	32
Travel/Vacations	45	38	35	32	32
Drug stores	43	34	32	28	29
Hardware stores	43	37	32	30	29
Repair services	38	30	29	26	25
Furniture stores	37	26	27	26	23
Appliance dealers	35	27	25	24	22
Auto/Truck dealers	32	25	23	23	21
Autos for sale by owner	32	25	24	23	22
Sports stores	29	24	22	19	19
Help wanted classified ads	28	23	22	20	20
Homes for sale	25	21	20	20	20

**Overall Demand
For Shopping At Home**

NEHST shows consumers how a videotex-equipped TV can be used to shop for and order things at home. Shopping at home is offered as a free service to all consumers in all five NEHST sample groups. While there's no fee charged for using the service itself, consumers are told that if they choose to have their purchases delivered to their homes, they may pay delivery fees.

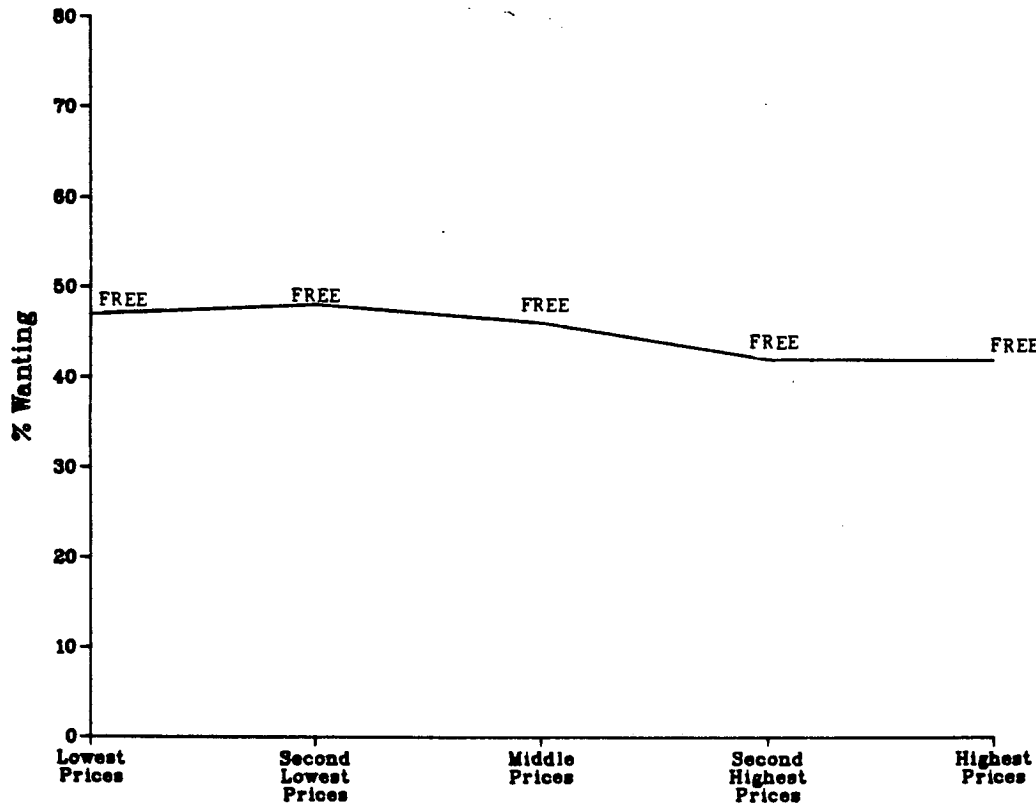
The reason why the service is offered free to all NEHST sample groups is a reflection of two factors:

- * Most videotex providers expect this to be a "free" service supported by transaction fees or by revenues gained through the sale of merchandise, rather than by monthly subscription fees. In order to encourage as many home shoppers to use the service as possible and therefore sell more merchandise, companies will want to make using the service as attractive as possible. Hence, it makes sense to offer the service for "free".
- * Earlier research projects have indicated consumers are reluctant to pay a service fee merely for the convenience of shopping at home rather than having to visit a store.

As a result, rather than associate a service fee with shopping at home, NEHST offers the service for free to learn how many consumers are willing to take the service in addition to the other pay services they want.

(Please note that some consumers might pay a service fee for shopping at home if the service enables them to buy things much cheaper than they can at stores. In this case, the savings they gain can more than offset the service fee. This premise was not tested by NEHST, since most companies interested in offering shopping at home don't plan to offer goods and services only at deeply-discounted prices. Therefore, rather than position shopping at home exclusively as a cheaper way to buy things, NEHST positions it as a convenient way of shopping at home rather than in person.)

Figure 18 shows the percentage of people wanting shopping at home among the five NEHST sample groups. Since the service costs nothing to all the groups, **there's little change in demand.** There's a slight decline among the two groups shown the highest prices for the other pay services, because when the other services cost more, fewer people get any videotex services at all. But in general, **interest in shopping at home is unaffected by the prices charged for other services.**



**Demand For Shopping At Home
Doesn't Indicate A Willingness To Buy Things At Home**

While it appears many people are willing to get the shopping at home service, it must be pointed out that offering the service for **free** makes many people want it, including some who aren't that enthusiastic about actually using it.

Hence, in studying the demand for shopping at home, those willing to get the service must be divided into two groups:

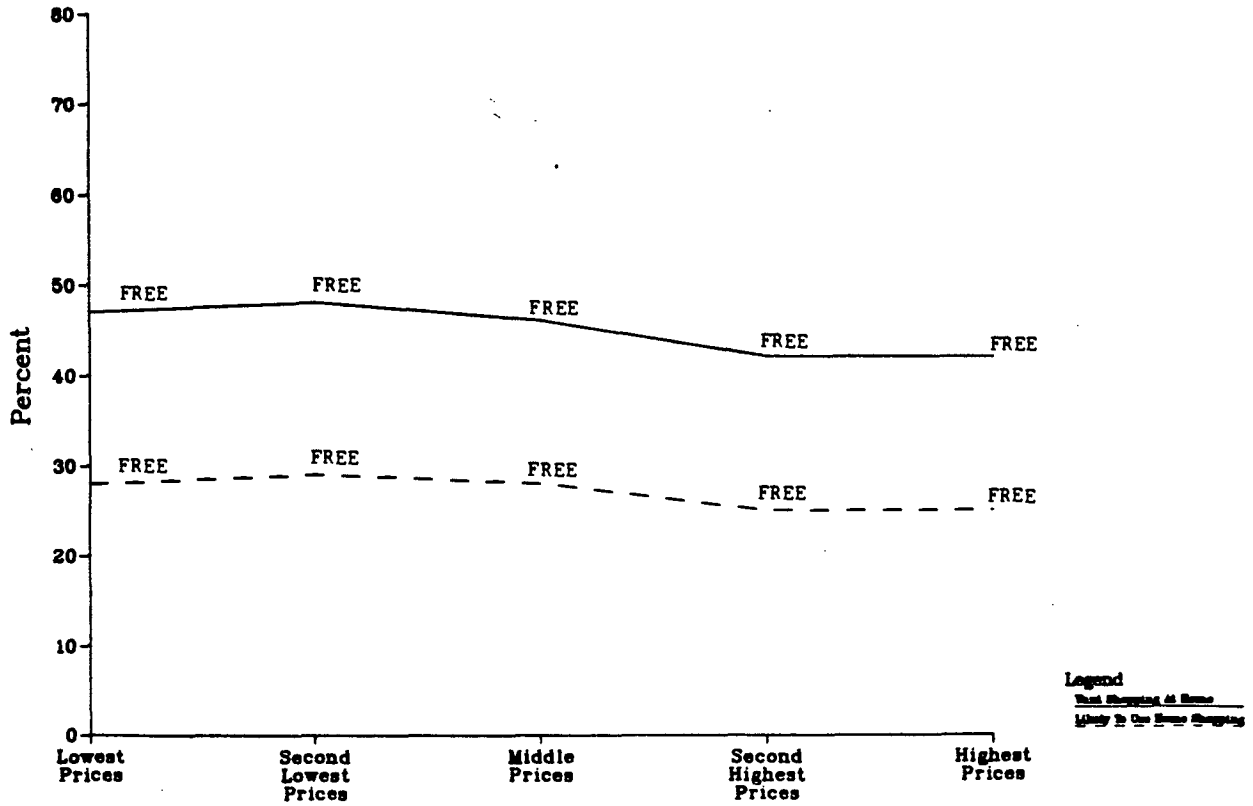
1. Those who merely take shopping at home because it's offered for free, and have doubts about using it.
2. Those who strongly want the service, and are more willing to make shopping at home transactions.

How can we tell which people who say they want home shopping are reluctant to use it? The answer comes from studying other questions asked by NEHST. In addition to indicating if they want home shopping, consumers agree or disagree with statements about the service. Looking at these questions suggests that out of every 10 people who say they want home shopping, about 4 have doubts about using it:

- * 43% of those saying they want home shopping also say "I won't **ever** do my shopping at home because I'll prefer getting out of the house to go shopping."
- * 41% say "Shopping at home isn't worth having because I won't buy **anything** without seeing it in person first."

These reactions indicate that about 40% of those who **say** they want home shopping are **reluctant to use it**. They simply agree to getting the service because it's offered for free, and they have little to lose by taking it.

The other 60% of those saying they want home shopping are much more positive about the service, and it seems more likely they'll use it. We can use this percentage to recompute the demand curve for home shopping shown in Figure 20 to arrive at a new curve showing how much of the market is likely to use it:



**What Kinds Of Items
Will People Shop At Home For?**

When given a list of items and asked which they'll be most likely to shop at home for, consumers react most positively to buying "package goods" supermarket items such as paper towels, toothpaste, canned fruits and vegetables, soda pop, and frozen foods. It's easy to buy these at home since consumers know the brands they prefer, and don't need to inspect the items when buying them.

Also popular are those items that have traditionally been bought by phone or mail order: tickets, books, and gifts.

The following table shows the percentage of the market willing to get home shopping and buy each of the items listed. Naturally, this percentage varies among the five NEHST sample groups:

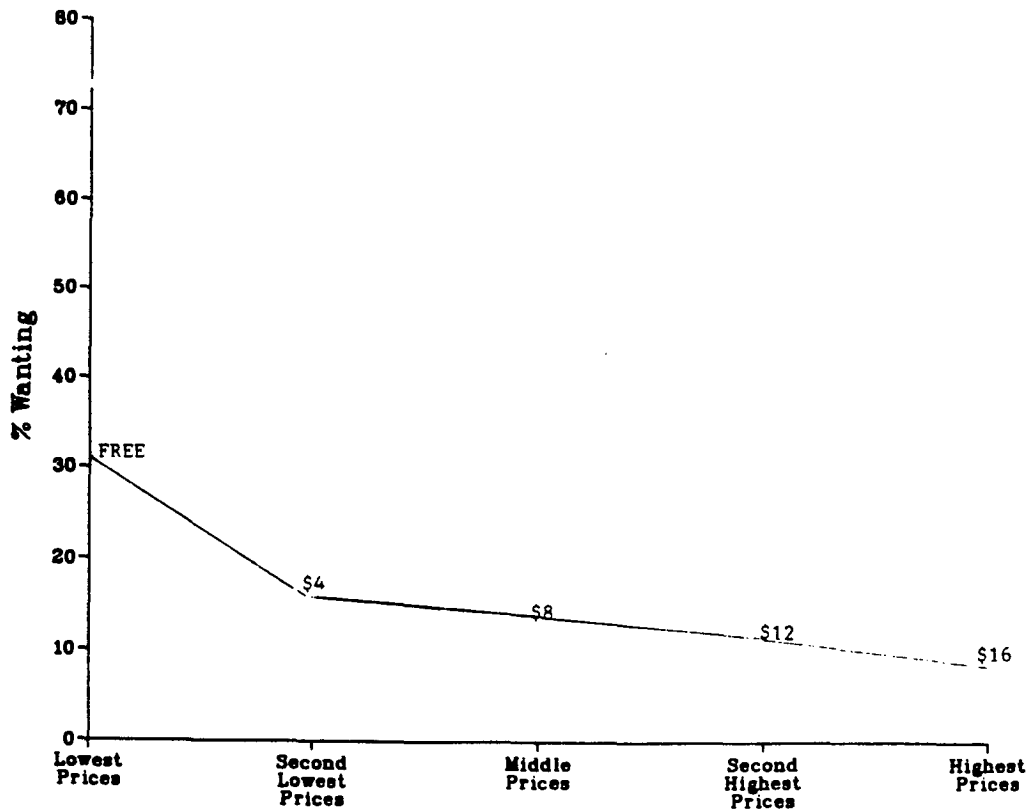
	<u>Lowest Prices</u>	<u>Second Lowest Prices</u>	<u>Middle Prices</u>	<u>Second Highest Prices</u>	<u>Highest Prices</u>
Paper towels	39	40	36	34	35
Soap, detergent	39	40	37	32	35
Concert tickets	38	37	36	32	33
Toothpaste, etc.	38	39	35	33	34
Canned fruit, veg.	36	36	33	31	32
Soda pop	35	37	33	30	33
Airline tickets	33	31	31	27	28
Books	33	32	30	27	28
Frozen foods	33	32	31	30	30
Prescriptions	32	31	28	27	27
Gifts	31	30	29	27	26
Milk	31	31	27	27	27
Bread	30	31	30	28	27
Eggs	29	28	28	26	25
Vacation tours	28	24	26	23	23
Blankets, sheets	27	26	26	25	23
Records	26	26	23	22	25
Toys	24	23	22	19	20
Calculators	22	19	19	18	16
Clothing	21	20	19	18	16
Hamburger	21	19	20	19	18
Cameras	20	17	17	16	14
Stocks & bonds	20	18	20	18	17
TV's & stereos	18	17	15	15	15
Appliances	17	14	17	13	12
Insurance	16	16	16	15	15
Produce	16	15	16	16	13
Cosmetics	16	16	16	13	14
Steak	14	13	13	15	11
Furniture	13	12	11	11	11
Jewelry	11	10	9	10	8
Placing bets	11	11	11	11	12

Overall Demand For Electronic Mail

NEHST demonstrates electronic mail as a service enabling consumers to use a videotex-equipped TV to write and send electronic letters across town or across the country. The demonstration shows the service being used for personal correspondence - sending an invitation to friends to come to a party - rather than for business uses. Other uses for electronic mail, such as community bulletin boards, sending one letter instantly to many households, etc. are not demonstrated.

The research shows many consumers have trouble understanding the need for an electronic mail service, primarily because they send very few written letters now. Hence, there's a tremendous resistance to paying a fixed monthly fee for something that may only be used occasionally. Most of their personal communication is **spoken, not written**. On their own, consumers apparently can't visualize any benefits to replacing a telephone call with an electronic letter. Accordingly, demand for electronic mail is small - much smaller than for any of the other videotex services.

Figure 16 shows how few people want the service among each of the five NEHST sample groups exposed to different prices. Even among the group offered electronic mail for **free**, only 31% want the service!



POTENTIAL VIDEOTEX MARKET
 AMONG GROUPS SHOWN VARIOUS PRICES

	LOWEST PRICES SHOWN	SECOND LOWEST PRICES SHOWN	MIDDLE PRICES SHOWN	SECOND HIGHEST PRICES SHOWN	HIGHEST PRICES SHOWN
(Number of Respondents)	(1240)	(1240)	(1240)	(1240)	(1240)
<u>Knowing the prices for the videotex hardware and services ...</u>					
I will get videotex	77%	71%	65%	63%	62%
Early	40%	33%	29%	23%	22%
I'll be one of the first	18%	12%	10%	8%	9%
I'll get videotex after a few people buy it	22	21	19	15	13
Later	37	38	36	40	40
I'll get videotex after I see a lot of people buying it	24	24	22	23	23
I'll get videotex after I see most people buying it	13	14	14	17	17
I will not get it	23	28	35	36	38
No answer	*	1	*	1	*

*Less than ½%.

POTENTIAL VIDEOTEX MARKET
AMONG HOUSEHOLD INCOME GROUPS

	UNDER \$15,000	\$15,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000 AND OVER
(Number of Respondents)	(1328)	(1420)	(1366)	(1024)	(615)
<u>Knowing the prices for the videotex hardware and services ...</u>					
I will get videotex	54%	69%	74%	76%	79%
Early	20%	28%	33%	36%	41%
I'll be one of the first	7%	11%	12%	13%	19%
I'll get videotex after a few people buy it	13	17	21	23	22
Later	34	41	41	40	38
I'll get videotex after I see a lot of people buying it	17	25	26	28	26
I'll get videotex after I see most people buying it	17	16	15	12	12
I will not get it	46	31	25	23	21
No answer	*	*	1	1	*

*Less than ½%.

POTENTIAL VIDEOTEX MARKET
AMONG CONSUMERS WITH VARIOUS EDUCATIONAL LEVELS

	LESS THAN HIGH SCHOOL GRADUATE	HIGH SCHOOL GRADUATE	TRADE SCHOOL OR SOME COLLEGE	COLLEGE GRADUATE
(Number of Respondents)	(568)	(1668)	(1958)	(1995)
<u>Knowing the prices for the videotex hardware and services ...</u>				
I will get videotex	45%	62%	73%	73%
Early	16%	24%	32%	34%
I'll be one of the first	4%	8%	12%	14%
I'll get videotex after a few people buy it	12	16	20	20
Later	29	38	41	39
I'll get videotex after I see a lot of people buying it	14	20	26	26
I'll get videotex after I see most people buying it	15	18	15	13
I will not get it	55	38	27	26
No answer	*	*	*	1

*Less than ½%.

POTENTIAL VIDEOTEX MARKET AMONG VARIOUS CABLE AND NON-CABLE GROUPS

	CABLE SUBSCRIBERS		NON-SUBSCRIBERS		
	Basic	Pay	Cable Disconnected	Marketed To, But Did Not Buy	Not Marketed To
(Number of Respondents)	(661)	(1267)	(246)	(1029)	(2788)
<u>Knowing the prices for the videotex hardware and services ...</u>					
I will get videotex	60%	78%	65%	57%	68%
Early	22%	39%	31%	21%	29%
I'll be one of the first	7%	16%	11%	7%	12%
I'll get videotex after a few people buy it	15	23	20	14	17
Later	38	39	34	36	39
I'll get videotex after I see a lot of people buying it	23	25	22	20	25
I'll get videotex after I see most people buying it	15	14	12	16	14
I will not get it	39	21	35	43	31
No answer	1	1	*	*	1

*Less than 1/2%.

Demographics

The majority of the \$20 or more purchasers are under 50 years old:

Among consumers shown monthly fee for each pay service of....

<u>Age</u>	<u>\$8</u>	<u>\$12</u>	<u>\$16</u>
18-34	46%	42%	52%
35-49	33	33	27
50-64	14	18	16
65 and over	7	7	5

While they are higher in income than average, some are in lower income categories:

Among consumers shown monthly fee for each pay service of....

<u>Income</u>	<u>\$8</u>	<u>\$12</u>	<u>\$16</u>
\$19,999 or less	32%	24%	31%
\$20,000 - \$34,999	31	41	35
\$35,000 and over	35	31	31
Not answered	2	4	3

Many are white collar workers:

Among consumers shown monthly fee for each pay service of....

<u>Occupation</u>	<u>\$8</u>	<u>\$12</u>	<u>\$16</u>
Blue collar	23%	22%	20%
White collar	33	38	43
Professional	25	18	18
Retired	10	12	10
Not answered	9	10	9

NEHST explores consumer interests and attitudes in more detail than any summary can discuss. So, you may find it useful to see more specifics regarding consumer reactions to:

- * Information Pages About Activities and Hobbies
- * Information Pages About News, Weather and Sports Topics
- * Information Pages About Special Interest Topics
- * Shopping Ad Guides About Stores, Products and Services
- * Shopping at Home for Products and Services
- * Reasons for Wanting Videotex
- * Reasons for Rejecting Videotex

The discussion on the preceding pages deals with "factors" made up of combinations of topics, products and "reasons" -- the "Busy Life Attitudes," "Good Life Interests," and so on. The NEHST Segmentation Analysis reveals that the factors are highly important in influencing videotex purchase decisions. Of course, shown individually, on the following tables, these items or variables may score lower or higher.

In the following pages, items are presented in rank order of the **differences between enthusiasts and non-enthusiasts**. This will help you to focus on the particular interests and attitudes that distinguish likely videotex buyers from more "reluctant" consumers. When enthusiasts are more interested in a particular topic, the difference between enthusiasts and non-enthusiasts is positive (+). When enthusiasts are less interested, the difference is negative (-).

**Interest in Information Pages
About Activities and Hobbies**

% Interested in getting information pages about...	<u>Enthusiasts</u>	<u>Non-Enthusiasts</u>	<u>Difference</u>
Personal computers	59%	25%	+34%
Calendar of entertainment	81	53	+28
Movie reviews and listings	80	53	+27
Restaurant reviews	64	42	+22
Personal photography	51	29	+22
Board games like chess or checkers	45	23	+22
TV schedules and program listings	76	55	+21
Camping and hiking	50	29	+21
TV reviews and news	73	53	+20
Personal exercise	67	47	+20
Auto repair	59	39	+20
Science fiction	47	27	+20
Travel, sightseeing and vacations	78	59	+19
Home improvement	78	59	+19
Theatre reviews	61	42	+19
Rock music	36	17	+19
Book reviews	56	38	+18
Recipes	65	49	+16
Home Decorating	64	48	+16
Puzzles and word games	54	38	+16
Children's activities like PTA, Scouts	35	19	+16
Jokes of the day	43	28	+15
Wine reviews and advice	33	18	+15
Dancing	38	24	+14
Houseplants and gardening	67	54	+13
Handicrafts	54	41	+13
Jogging	28	15	+13
Skiing	26	13	+13
Art like painting and museums	38	26	+12
Bicycling	26	14	+12
Racquetball	22	10	+12
Classical music	39	29	+10
Fishing	38	28	+10
Collecting like stamps, antiques	29	19	+10

Activities and Hobbies Continued...

	<u>Enthusiasts</u>	<u>Non-Enthusiasts</u>	<u>Difference</u>
% Interested in getting information pages about...			
Boating information	26%	16%	+10%
Tennis	24	14	+10
Playing baseball	28	19	+ 9
Wagering and betting	22	13	+ 9
Country music	37	29	+ 8
Golf	24	17	+ 7
Hunting	22	15	+ 7
Ballet	20	13	+ 7
Needlework	37	31	+ 6
Clubs like Elks, Boosters	16	11	+ 5
Bowling	19	16	+ 3
Religion	33	34	- 1

Interest in Information Pages
About News, Weather and Sports Topics

% Interested in getting information pages about...	<u>Enthusiasts</u>	<u>Non-Enthusiasts</u>	<u>Difference</u>
Scientific developments	82%	57%	+25%
Rush hour traffic conditions	56	33	+23
Business, Wall Street	60	40	+20
Local weather conditions	92	73	+19
Economic outlook	78	59	+19
Arms race and defense	75	56	+19
Energy crisis and conservation	73	54	+19
Weather conditions in other cities	59	40	+19
People in the news	63	45	+18
Professional sports	65	48	+17
World News	86	70	+16
Crime	66	50	+16
Football	65	49	+16
Women's rights and roles	50	34	+16
News for children	46	30	+16
State government	64	49	+15
Fashion trends	47	32	+15
Famous celebrities	42	27	+15
Local schools	53	38	+15
Local government	67	53	+14
Election campaigns	61	47	+14
US Congress and Senate	66	53	+13
College sports	42	30	+12
Basketball	39	29	+10
Tennis	27	17	+10
Baseball	47	38	+ 9
Labor unions	28	19	+ 9
Hockey	25	16	+ 9
High school sports	23	14	+ 9
Golf	26	20	+ 6

Interest in Information Pages
About Special Interest Topics

	<u>Enthusiasts</u>	<u>Non-Enthusiasts</u>	<u>Difference</u>
% Interested in getting information pages about...			
Information about your business	73%	42%	+31%
Encyclopedias	63	35	+28
Consumer product ratings	89	67	+22
Managing money and investments	78	56	+22
Airline schedules	43	22	+21
Career guidance	43	22	+21
Legal advice	74	54	+20
Health tips	73	53	+20
Listing of local government agencies	59	39	+20
Food calorie charts	56	36	+20
World almanac of records, statistics	54	34	+20
Tax tips	74	55	+19
Child-rearing tips	42	23	+19
Emergency phone numbers	86	68	+18
Current interest rates	65	47	+18
Medical and emergency advice	87	70	+17
Inflation coping tips	74	57	+17
Homemaking tips	61	44	+17
Commodity prices	47	31	+16
Calendar of community meetings	43	27	+16
Bus and mass transit schedules	36	21	+15
Current stock prices	41	27	+14
Family planning	27	13	+14
Horoscopes	31	21	+10
Betting odds	21	11	+10
Personal advice like "Dear Abby"	28	19	+9

**Interest in Shopping Ad Guides
About Stores, Products and Services**

% Interested in shopping guides about...	<u>Enthusiasts</u>	<u>Non-Enthusiasts</u>	<u>Difference</u>
Theatre listings	81%	48%	+33%
Gift ideas	75	43	+32
Clothing stores	78	47	+31
Restaurant prices and menus	81	53	+28
Hardware stores	68	40	+28
Supermarkets	88	62	+26
Drug stores	66	40	+26
Furniture stores	56	30	+26
Sports stores	48	22	+26
Travel and vacations	74	49	+25
Used cars for sale	52	27	+25
Appliance dealers	54	30	+24
Auto and truck dealers	51	27	+24
Repair services	60	37	+23
Help wanted ads	46	25	+21
Homes for sale, apartments for rent	44	24	+20

**Interest in Shopping at Home
for Products and Services**

	<u>Enthusiasts</u>	<u>Non-Enthusiasts</u>	<u>Difference</u>
% Interested in shopping at home for...			
Gifts	64%	27%	+37%
Concert tickets	80	44	+36
Books	67	33	+34
Records and tapes	56	23	+33
Prescriptions	65	33	+32
Toys	48	18	+30
Calculators	43	15	+28
Airline tickets	68	42	+26
Cameras	38	13	+25
Clothing	43	19	+24
TV and stereo equipment	37	13	+24
Vacations and tours	56	33	+23
Linens	56	23	+23
Stocks and bonds	43	21	+22
Appliances	34	13	+21
Cosmetics	34	13	+21
Insurance	36	17	+19
Furniture	27	9	+18
Jewelry	23	7	+16
Bets on races and lotteries	26	13	+13

Reasons for Wanting Videotex

<u>% Agreeing with the statement...</u>	<u>Enthu- siasts</u>	<u>Non-Enthu- siasts</u>	<u>Differ- ence</u>
"I want a home services control unit because it'll allow me to get a lot more information than I can get now from other sources."	79%	30%	+49%
"I'll enjoy shopping and banking at home because I have such a busy life, I don't always have time to shop or bank in person."	74	28	+46
"I want banking at home because it'll be easier than paying bills by writing checks and mailing them."	85	40	+45
"I want a home services control unit because the information will be more up-to-the-minute than newspapers, TV or radio."	83	40	+43
"I believe having these new home services can save me a lot of money."	66	23	+43
"I'll want information pages because they'll be there when I want them, without waiting."	87	45	+42
"I think getting information pages on TV will be easier than the way I get information now."	74	33	+41
"I'll like shopping at home because it'll be much faster than going to a store."	78	38	+40
"I'll prefer shopping without leaving home because it'll be much easier than shopping in person."	72	33	+39
"I hate shopping in person, especially waiting in lines or trying to park, so I'll do as much shopping at home as I can."	71	32	+39

Reasons for Wanting Videotex Continued...

<u>% Agreeing with the statement...</u>	<u>Enthu- siasts</u>	<u>Non-Enthu- siasts</u>	<u>Differ- ence</u>
"I'll love shopping at home because I'll save a lot of money on gasoline bills by not having to drive to stores."	75%	37%	+38%
"I'll feel safer because in an emergency I'll get news or weather at the touch of a button."	82	46	+36
"I want banking at home because it won't let me bounce a check."	73	37	+36
"I want a home services control unit because the world is becoming more computerized and I'd like to use computer-like things."	76	41	+35
"By comparing price specials, I'll save so much, it'll more than pay for the cost of having a home services control unit."	61	26	+35
"The regular mail system is getting so expensive and unreliable I'll prefer sending letters from home electronically."	60	27	+33
"Banking at home will help keep better track of my accounts, since right now I'm never sure what my balances are."	57	25	+32
"I'll like receiving information pages because they'll probably help make me more informed."	84	53	+31
"I'll love reading guide pages because I have trouble finding out which stores are having sales and bargains."	72	42	+30

Reasons for Wanting Videotex Continued...

<u>% Agreeing with the statement...</u>	<u>Enthu- siasts</u>	<u>Non-Enthu- siasts</u>	<u>Differ- ence</u>
"I often get so bored watching regular TV programs, I'll love reading information pages on TV instead."	69%	39%	+30%
"I often forget to pay bills on time, so I'll worry less with banking at home."	46	19	+27
"I'll prefer sending electronic letters because I can't afford to wait days for ordinary mail to get there."	41	16	+25
"Sending letters from home electronically will save me a lot of money instead of making long-distance phone calls."	54	30	+24
"I don't like watching TV for entertainment, but I'll enjoy using my TV for receiving information pages, banking and shopping at home, etc."	42	21	+21
"Tying up our regular TV set using home services wouldn't cause too much inconvenience for anyone in the family."	76	61	+15
"I'm especially interested in reading pages about sale prices because I'm the kind of person who searches for bargains."	73	61	+12
"Once I get information pages on my TV, I'll probably have no need to read a regular newspaper."	30	18	+12
"Once I get information pages on my TV, I'll probably have no need to watch TV newscasts."	35	24	+11
"I don't enjoy reading news mixed with advertising pages."	60	52	+ 8
"I'll prefer having advertising pages if it makes it cheaper to subscribe."	69	66	+ 3

Reasons for Rejecting Videotex

<u>% Agreeing with the statement...</u>	<u>Enthu- siasts</u>	<u>Non-Enthu- siasts</u>	<u>Differ- ence</u>
"I'm so used to paying my bills the way I do now that I'll never switch to banking at home."	18%	66%	-48%
"I'll never bank or shop at home because I prefer dealing face-to-face with a person."	21	62	-41
"I'm not interested in getting information pages because I already get enough information."	33	73	-40
"I'll never take a chance paying bills by banking at home because something might go wrong."	29	62	-33
"I won't ever do my shopping at home because I'll prefer getting out of the house to go shopping."	43	75	-32
"Having banking at home isn't worth it because I'll still have to go to the bank to get cash."	42	73	-31
"I'll never read information pages on a TV because I'll prefer reading newspapers or magazines that I can carry with me wherever I go."	32	63	-31
"I'll probably use these new home services only once in a while."	53	82	-29
"Shopping at home isn't worth having because I won't buy anything without seeing it in person."	42	71	-29
"Reading information on a TV screen doesn't interest me because it's much harder than reading on paper."	27	55	-28

Reasons for Rejecting Videotex Continued...

<u>% Agreeing with the statement...</u>	<u>Enthu- siasts</u>	<u>Non-Enthu- siasts</u>	<u>Differ- ence</u>
"Up-to-the-minute news isn't that important to me because news and weather don't change that often."	38%	62%	-24%
"I won't shop at home because I couldn't be sure I was getting a good buy unless I could deal face-to-face with a salesperson."	35	58	-23
"Home services may be difficult to use -- I'm not used to using computer-like machines."	25	48	-23
"I won't send electronic letters because I'm not a good typist."	20	40	-20
"I won't get the new home services because I'm already having trouble paying the bills I have."	35	54	-19
"I'm strongly opposed to home services because someone might spy on my banking, shopping, or reading habits."	33	51	-18
"I'll never send electronic letters because there's no written copy of what I've sent."	41	58	-17
"I'll never buy a home services control unit unless having it saves me a lot of money."	69	83	-14
"People in my family will be annoyed because they won't be able to watch their TV programs if I am using our TV set for home services."	38	52	-14

Reasons for Rejecting Videotex Continued...

<u>% Agreeing with the statement...</u>	<u>Enthu- siasts</u>	<u>Non-Enthu- siasts</u>	<u>Differ- ence</u>
"I'll never send electronically delivered letters because I'd be afraid the wrong person might end up reading what I've sent."	44%	55%	-11%
"I'll probably send very few letters electronically because I write few letters at home now."	71	76	- 5

Control Units

Are consumers willing to pay for videotex control units? Do they prefer buying or renting them? At what cost? What type of control is preferred? What relationship do home computers and video games have to videotex controls?

What's the best strategy for a control unit manufacturer to pursue? A videotex service provider?

Answers to these issues are provided in this section.

How NEHST Consumers Evaluate Control Units

The NEHST questionnaire shows consumers three different kinds of videotex control units:

- A - **Handheld keypad:** Does information, advertising, banking, and shopping at home services, but **not** electronic mail. You attach it to your TV set. This unit is small enough to hold in one hand.
- B - **Keyboard without screen:** Does everything the keypad can, **plus** electronic mail because it has a control with letters and numbers, like a typewriter.
- C - **Keyboard with screen:** Does everything the keypad and keyboard without screen does, **plus** has its own built-in TV, allowing you to use home services at the same time other family members are using your regular TV to watch programs. Also, you can use it in a different room than the one where your regular TV is located, placing it on a table, a desk, etc.

The control units are described solely as videotex controls and not home computers, to avoid any biases on the part of consumers who may react negatively to home computers, but not videotex controls.

NEHST Researches
Different Control Unit Scenarios

To determine whether consumers prefer buying or renting control units as well as the kind of control they prefer, the NEHST questionnaire explores several scenarios:

Scenario 1 - Demand when consumers have no choice. They are offered only one of the three units ("A", "B", or "C") and only one payment method (renting or buying).

Scenario 2 - Demand when consumers can buy or rent any of the three units.

Scenario 3 - Demand when consumers can only buy any of the three units, but can't rent them.

Scenario 4 - Demand when consumers can only rent any of the three units, but can't buy them.

All of these scenarios are explored in this section, in the order shown above.

**Different Groups Evaluate
Different Prices For Units**

The consumers researched by NEHST are divided into five equal groups, and each is exposed to a different version of the questionnaire containing different prices for buying or renting control units. By comparing reactions among the five groups, the effects of charging various prices are revealed.

In the five questionnaire versions, controls cost as follow:

Among NEHST sample group shown the...

	<u>Lowest Prices</u>	<u>Second Lowest Prices</u>	<u>Middle Prices</u>	<u>Second Highest Prices</u>	<u>Highest Prices</u>
Cost of buying...					
A - keypad	\$100	\$200	\$300	\$400	\$500
B - keyboard with screen	\$200	\$300	\$400	\$500	\$600
C - keyboard without screen	\$500	\$600	\$600	\$700	\$800
Cost of renting...					
A - keypad	\$ 4	\$ 8	\$12	\$16	\$20
B - keyboard with screen	\$ 8	\$12	\$16	\$20	\$24
C - keyboard without screen	\$20	\$24	\$28	\$32	\$36

**Scenario 1- Demand When
Only One Type Of Unit Is Available**

Consumers may not be able to pick the kind of control unit they want, or the method of paying for it.

If controls are marketed the way cable TV companies market their cable converters, the consumer may have no choice but to take whatever one control the videotex company offers, and accept whatever payment method - buying or renting - the company requires.

What happens when consumers have no choice, and are offered only one type of control? Which one type of control should be offered? Should it be rented or sold?

NEHST explores six possibilities:

- Selling "A" - keypad
- Selling "B" - keyboard without screen
- Selling "C" - keyboard with screen
- Renting "A" - keypad
- Renting "B" - keyboard without screen
- Renting "C" - keyboard with screen

If only one option is offered, which one works best?

Overall, **the best strategy is selling "A" - the keypad.** The percentage of people willing to buy it depends upon the price charged for it, as shown by comparing the reactions of the five NEHST sample groups, each of which was exposed to a different price for the unit. Demand ranges from 59% among the group given a \$100 cost for the unit to 26% among those given a \$500 cost:

	Among NEHST group shown a purchase price of ...				
	<u>\$100</u>	<u>\$200</u>	<u>\$300</u>	<u>\$400</u>	<u>\$500</u>
Will buy "A" keypad	59%	42%	36%	31%	26%

The next best strategy is renting "A" - the keypad. Slightly fewer consumers are willing to accept this strategy:

	Among NEHST group shown a monthly rental of ...				
	<u>\$4</u>	<u>\$8</u>	<u>\$12</u>	<u>\$16</u>	<u>\$20</u>
Will rent "A" keypad	54%	35%	31%	30%	24%

The next most popular offering is selling "B", the keyboard without screen:

	Among NEHST group shown a purchase price of ...				
	<u>\$200</u>	<u>\$300</u>	<u>\$400</u>	<u>\$500</u>	<u>\$600</u>
Will buy "B" keyboard without screen	40%	31%	31%	25%	23%

Demand drops slightly when consumers must rent "B" - the keyboard without screen:

	Among NEHST group shown a monthly rental of ...				
	<u>\$8</u>	<u>\$12</u>	<u>\$16</u>	<u>\$20</u>	<u>\$24</u>
Will rent "B" keyboard without screen	38%	24%	23%	22%	19%

Demand drops considerably when the only unit offered is the more expensive "C" - the keyboard with screen. Those willing to buy it:

	Among NEHST group shown a purchase price of ...				
	<u>\$500</u>	<u>\$600</u>	<u>\$700</u>	<u>\$800</u>	<u>\$900</u>
Will buy "C" keyboard with screen	20%	17%	19%	18%	17%

And if consumers can't buy "C" - the keyboard with screen - and can only rent it, demand drops even further:

	Among NEHST group shown a monthly rental of ...				
	<u>\$20</u>	<u>\$24</u>	<u>\$28</u>	<u>\$32</u>	<u>\$36</u>
Will rent "C" keyboard with screen	17%	12%	14%	13%	14%

Demand is similar whether a \$24 per month fee is charged, or a \$36 one.

**Summary of Scenario 1 -
When Only One Unit Is Offered**

Overall, the figures suggest that **selling units is always slightly more popular than renting**. However, since renting the unit drops demand only slightly, it makes little difference which option is offered.

As you'd expect, the cheaper the unit offered, the more people are willing to buy or rent it. Offering the cheapest unit available - in this case keypad unit "A" - is the best strategy.

But the research also suggests that **the kind of unit offered doesn't seem to matter much**. What is more important to consumers is the price of the unit.

To illustrate the point, compare how many people are willing to buy the keypad and keyboard at any given price. When "A" - the keypad - costs \$200, 42% buy it. When "B" - the keyboard without screen - costs \$200, 40% buy it! Demand is identical, regardless of the kind of unit.

This occurs at other prices, too. When "A" - the keypad - is \$500, 26% buy it. When "B" - the keyboard without screen - is \$500, 25% buy it. And even when "C" - the keyboard with screen - costs \$500, almost as many - 20% - buy it.

Therefore, offering consumers a more elaborate unit for the same price as a less elaborate one doesn't make more people want it.

Another interesting finding is that consumers react the same to certain price levels. When renting units, for example, consumers don't seem to react any differently whether the rental cost is \$8, \$12, or \$16 a month. Look at how similar demand for renting unit "A" is among three of the NEHST sample groups shown these prices:

Among NEHST group shown a monthly rental of...

	<u>\$4</u>	<u>\$8</u>	<u>\$12</u>	<u>\$16</u>	<u>\$20</u>
Will rent "A" keypad	54%	35%	31%	30%	24%

When it's \$8, 35% want it. At \$12, 31% do. And even at \$16, 30% will rent. It appears about the same number of people will rent a unit in these price ranges. Therefore, a videotex operator may as well charge \$16 a month, since it affects demand only slightly.

When selling units, there is little difference in demand between charging \$300 or \$400. As an example, consider the number willing to buy unit "B":

Among NEHST group shown a purchase price of ...

	<u>\$200</u>	<u>\$300</u>	<u>\$400</u>	<u>\$500</u>	<u>\$600</u>
Will buy "B" keyboard without screen	40%	31%	31%	25%	23%

When it costs \$300, 31% will buy it, the same as when it costs \$400. But once the price goes up to \$500, demand drops. Apparently, consumers see a difference between \$200 and \$300, but not between \$300 and \$400. But \$500 is different!

And once price goes above \$500, there's hardly any drop in demand at all. Look at how constant the demand is for buying unit "C", regardless of whether it costs \$500 or \$900:

Among NEHST group shown a purchase price of ...

	<u>\$500</u>	<u>\$600</u>	<u>\$700</u>	<u>\$800</u>	<u>\$900</u>
Will buy "C" keyboard with screen	20%	17%	19%	18%	17%

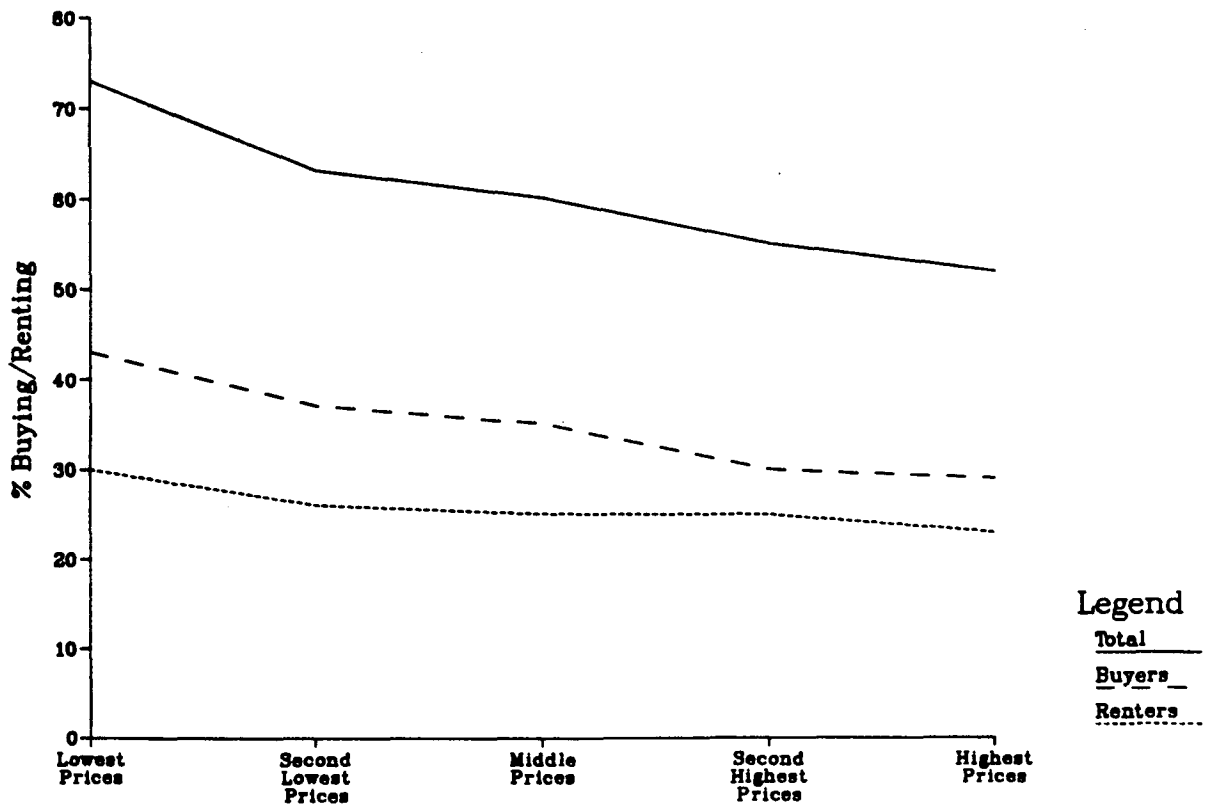
If a consumer can afford a \$500 unit, he's just as likely to be able to buy a \$900 one.

Scenario 2 - Demand When Consumers Can Buy Or Rent Any Unit

We've explored what happens when consumers have no choice, and must take the one kind of unit that's offered. But what happens when consumers are given a choice of buying or renting any of the three videotex units - "A", "B", or "C"?

Some interesting patterns emerge. First, the majority of people are willing to buy or rent some type of videotex control unit, as shown in Figure 23. The top line shows the total percentage of people willing to get a unit among the five NEHST sample groups exposed to different prices. At the left, 73% of the group shown the lowest prices for units want one. This drops to 52% at the right among the group shown the highest prices.

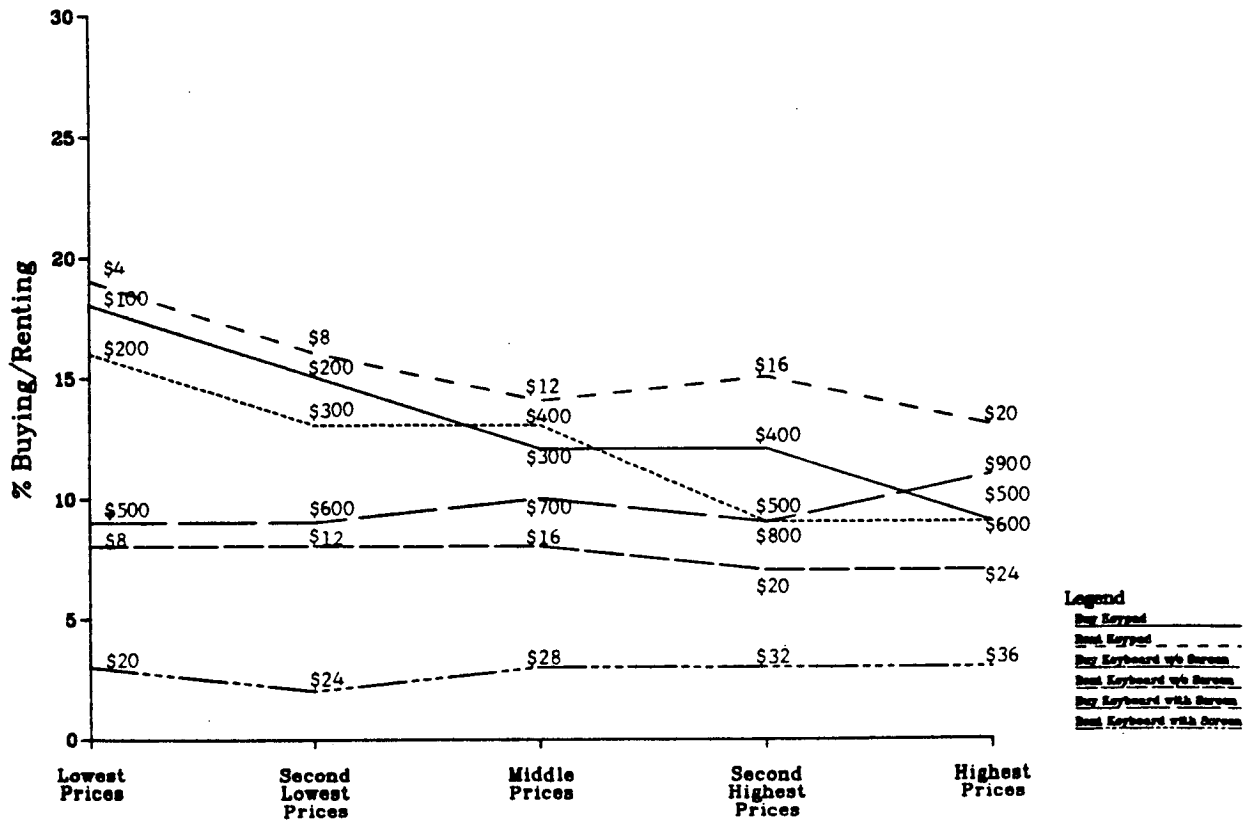
Overall, more people prefer buying units than renting. The dashed line is the percentage buying controls, and the dotted line the percentage renting.



Which types of controls do they prefer buying or renting? Figure 24 shows that no one control emerges as a substantial leader above the others.

Most people choose renting the cheaper keypad unit, and almost as many choose buying it. Also popular is buying the keyboard without screen.

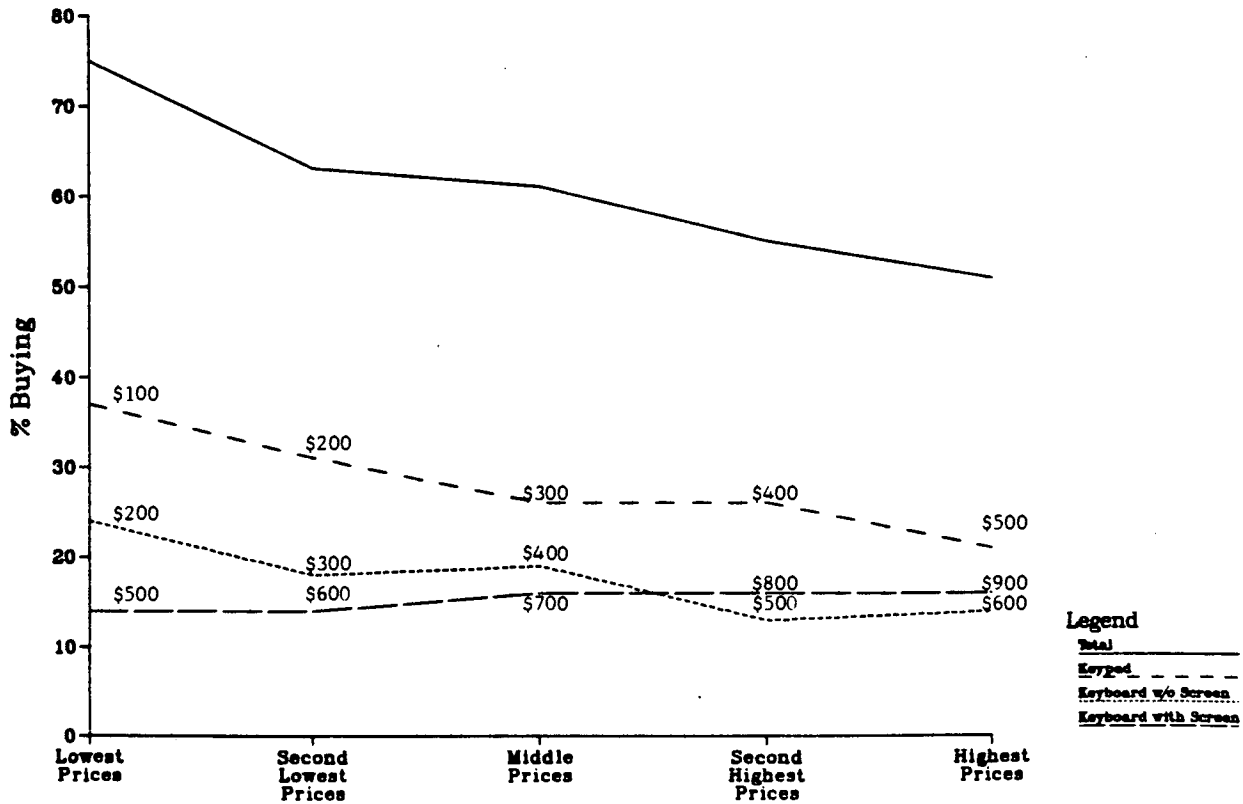
Smaller groups wish to either buy the keyboard with screen, or rent the keyboard without screen. Even fewer rent the keyboard with screen.



**Scenario 3 - Demand When
Consumers Can Only Buy
Any Of Three Units, But Can't Rent Them**

It's possible consumers won't be able to rent controls. They may only be marketed in stores the same way TV sets are, and consumers will have a variety of them to buy. Given a choice of buying any of the three control units, which do they choose?

Figure 25 shows the percentage choosing the keypad represented by the short-dashed line. The dotted line is for the keyboard without screen, and the long-dashed line is for the keyboard with screen. Adding all three lines together results in the top line, which is the total percentage of people willing to buy any unit. This ranges from 75% at the left among the NEHST sample group shown a \$100 cost for the cheapest unit, to 51% at the right among the group shown a \$500 cost.



As you can see, the overall favorite is the keypad. The keyboard without screen is preferred over the keyboard with screen at lower prices, but as price goes up the keyboard with screen slips ahead.

Some insights into how consumers value control units are found within Figure 25 on the preceding page.

Notice the plateaus in the curves where increasing price has little effect on demand.

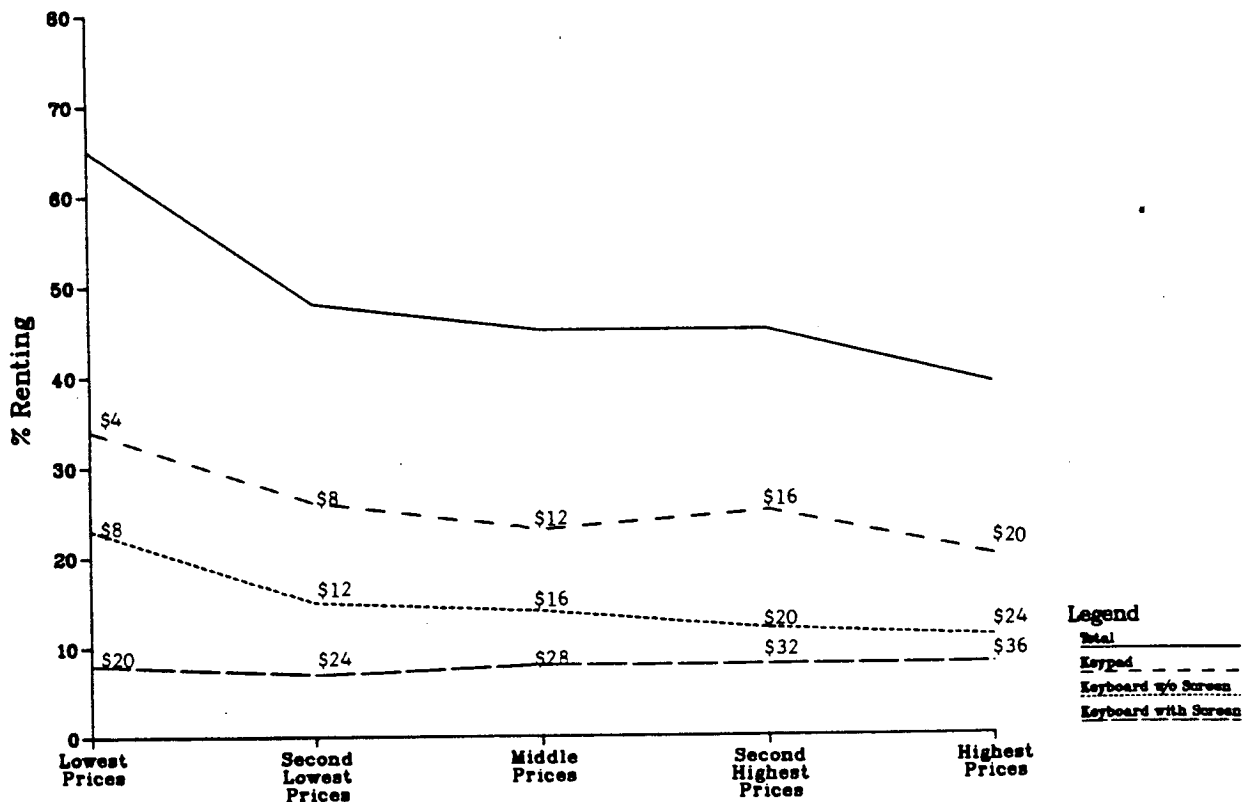
For both the keypad and keyboard without screen, there's a flat spot when price changes from \$300 to \$400. There's no drop in demand because these two prices are the same to the consumer. But demand drops again when price goes from \$400 to \$500. In effect, the consumer is saying "Whether it's \$300 or \$400 doesn't matter, but when it's \$500 that's different."

Once price reaches \$500, demand is steady. Those willing to pay \$500 are willing to pay \$900.

**Scenario 4 - Demand When
Consumers Can Only Rent
Any Of Three Units, But Can't Buy Them**

What happens when consumers cannot buy units, but must rent them? Given a choice of renting any of the three control units, which do they choose?

Figure 26 shows the percentage willing to rent the keypad represented by the short-dashed line. The dotted line is for the keyboard without screen, and the long-dashed line is the keyboard with screen. Adding all three lines together results in the top line, which is the total percentage of people willing to rent any unit. This ranges from 65% at the left when the cheapest control rents for only \$4 per month, to 39% at the right when the cheapest control rents for \$20 per month.



Overall, the favorite is the keypad. The keyboard without screen is preferred over the keyboard with screen.

Notice the plateaus in the curves where demand doesn't drop when the price increases. For the keypad there is little change in the \$8 to \$16 range. For the keyboard without screen, there's little change from \$12 to \$24. And there's virtually no dip in demand for the keyboard with screen anywhere in the \$20 to \$36 range.

Making Maximum Revenues From Control Units

So far, we've seen the percentage of people willing to get control units when they are offered in various ways. Naturally, the research shows that to sell or rent the most units, the price should be as low as possible.

But getting the most people to buy or rent controls is not necessarily the true goal for a control unit manufacturer. Getting the most revenue is. Does charging more result in greater revenues, even though demand is decreased?

This section explores strategies for making maximum revenue from controls. Revenue projections are made here for two of the control unit scenarios just presented:

Scenario 3 - Demand when consumers can only **buy** any of the three units, but can't rent them.

Scenario 4 - Demand when consumers can only **rent** any of the three units, but can't buy them.

Any conclusions drawn about Scenarios 1 and 2 are similar to those from Scenarios 3 and 4.

**Scenario 3 - Revenues When
Consumers Can Only Buy
Any Of Three Units, But Can't Rent Them**

When consumers have a choice of three units to buy, we've seen in Figure 25 that to sell the most units, the price should be as low as possible. For instance, the most people - 37% - buy keypads when the price is the lowest at \$100.

But the \$100 price isn't the best to charge if your goal is making maximum revenues from the sale of keypad units. Revenue is maximized at \$400! How is this determined?

First, we calculate the revenues made through selling keypads by simply multiplying the cost of the unit by the percentage of the market willing to buy it. For instance, in Figure 25, we saw that 37% buy the keypad when it costs \$100. This means out of every 100 homes in the marketplace, 37 will spend \$100 on keypads, generating \$3700 in revenues from keypad sales for every 100 homes in the market. (37 x \$100 = \$3700. Projected to a city of 100,000 homes, \$3,700,000 in revenues will be made.)

Applying this formula to the percentage willing to buy keypads at the various prices tested in NEHST, we compute revenues as follows:

<u>Price of keypad</u>		<u>Percentage Buying</u>		<u>Revenues made per 100 homes</u>
\$100	x	37	=	\$ 3700
\$200	x	31	=	\$ 6200
\$300	x	26	=	\$ 7800
\$400	x	26	=	\$10400
\$500	x	21	=	\$10500

Revenues peak at the \$400 price! Raising the price to \$500 doesn't really increase the total money made, because the drop in demand offsets the price increase. And lowering price to \$300 or less results in less revenues.

What about revenues from selling the keyboard unit without screen?

<u>Price of keyboard without screen</u>		<u>Percentage Buying</u>		<u>Revenues made per 100 homes</u>
\$200	x	24	=	\$ 4800
\$300	x	18	=	\$ 5400
\$400	x	19	=	\$ 7600
\$500	x	13	=	\$ 6500
\$600	x	14	=	\$ 8400

Again, the \$400 price makes more revenues than charging \$500! Once \$600 is reached, however, revenues increase again.

For the keyboard with screen, revenues are maximized by charging \$900.

<u>Price of keyboard with screen</u>		<u>Percentage Buying</u>		<u>Revenues made per 100 homes</u>
\$500	x	14	=	\$ 7000
\$600	x	14	=	\$ 8400
\$700	x	16	=	\$11200
\$800	x	16	=	\$12800
\$900	x	16	=	\$14400

**Summary Of Maximum Revenues
When All Three Units Are Sold**

It appears that \$400 is a "magic" price with consumers for buying videotex controls, whether the unit is a keypad or keyboard with a screen. At this price, revenues are maximized. With the more sophisticated unit - the keyboard with screen - the \$900 price is best, since those desiring this unit are "die-hards" who want it regardless of the price.

This suggests that to maximize revenues, at least two types of units should be offered:

- \$400 keypad or keyboard without screen
- \$900 keyboard with screen

**Scenario 4 - Revenues When
Consumers Can Only Rent
Any Of Three Units, But Can't Buy Them**

Figure 26 shows demand for various controls when consumers can only rent one of the three, and can't buy them. Obviously, it shows that to rent the most units, the price should be as low as possible. For instance, the most people - 34% - rent keypads when the price is the lowest, at \$4 per month.

But \$4 per month isn't the price to charge if your goal is making maximum revenues from the rental of keypad units. Revenues are maximized by charging \$16 per month. Here's why.

<u>Price of keypad</u>		<u>Percentage Renting</u>		<u>Revenues made per 100 homes</u>
\$ 4	x	34	=	\$ 136
\$ 8	x	26	=	\$ 208
\$12	x	23	=	\$ 276
\$16	x	25	=	\$ 400
\$20	x	20	=	\$ 400

Revenues peak at the \$16 price! Raising the price to \$20 doesn't increase the total money made, because the drop in demand offsets the price increase. The same revenue is made, but since only 20% rent compared to 25% at \$16, most videotex providers will benefit by charging \$16 and gaining more subscribers to their services.

What about revenues from renting the keyboard unit without screen? The \$24 per month price creates the most revenue, because there's little increase in demand even when the price is lowered all the way to \$12 per month.

<u>Price of keyboard without sceen</u>		<u>Percentage Renting</u>		<u>Revenues made per 100 homes</u>
\$ 8	x	23	=	\$ 184
\$12	x	15	=	\$ 180
\$16	x	14	=	\$ 224
\$20	x	12	=	\$ 240
\$24	x	11	=	\$ 264

For the keyboard with screen, charging \$36 per month results in maximum revenues.

<u>Price of keyboard with screen</u>		<u>Percentage Renting</u>		<u>Revenues made per 100 homes</u>
\$20	x	8	=	\$ 160
\$24	x	7	=	\$ 168
\$28	x	8	=	\$ 224
\$32	x	8	=	\$ 256
\$36	x	8	=	\$ 288

Picture Resolution

Will consumers pay more to get higher-quality videotex graphics?

During the NEHST demonstration, consumers are shown an information page containing text and a graphic of a helicopter. The page is presented in two forms, both identical except for the graphic:

Higher-quality - The helicopter graphic is done in Telidon alpha-geometric higher-resolution.

Lower-quality - The helicopter graphic is done in Antiope mosaic lower-resolution.

Consumers are asked whether they prefer paying more to get an information service with the higher-quality pictures, or paying 25% less to get the service with lower-quality pictures.

The price charged for each service varies in each of the five versions of the NEHST questionnaire:

	<u>Lowest Prices</u>	<u>Second Lowest Prices</u>	<u>Middle Prices</u>	<u>Second Highest Prices</u>	<u>Highest Prices</u>
Higher-quality	Free	\$4	\$8	\$12	\$16
Lower-quality	Free	\$3	\$6	\$ 9	\$12

Even when the price difference between the services is large, the majority of people prefer paying more for the service with higher-quality pictures:

	Among consumers shown service with higher-quality pictures at a monthly cost of ...				
	<u>Free</u>	<u>\$4</u>	<u>\$8</u>	<u>\$12</u>	<u>\$16</u>
Prefer higher- quality service	71%	45%	37%	33%	31%
Prefer lower- quality service at a 25% discount	11	21	23	25	23
Neither/No answer	18	34	40	42	46

Early adopters wanting to be first to get videotex services have an even stronger preference for the higher-quality service than others.

**Home Computers,
Video Games,
And Videotex Control Units**

Consumers' interest home computers and video games are obviously related to their interest in videotex control units. The new generation of home computers emerging now are capable of decoding videotex pictures, and most videotex units will probably double as home computers. Since most videotex providers plan to offer video games as a service, videotex units will overlap with dedicated video game users.

Some industry observers suggest the growth of videotex will occur only after consumers have already purchased home computers and/or more sophisticated video game units. Once they've bought these devices, they'll look for additional things to do with them, and begin using videotex services.

Another scenario suggests the opposite - many consumers are less interested in home computers or video games, but strongly interested in videotex services. While they are not likely to buy a home computer or video game at present, they'll want a home terminal once videotex services become widespread. In fact, the availability of videotex will trigger the home computer "explosion."

NEHST research supports the latter scenario.

Home Computers

Consumers are much more likely to purchase a unit positioned as a videotex control than as a home computer. Here are the facts:

- * Only 14% plan to buy a home computer
- * 52% will buy a videotex unit when the cheapest unit available is \$500. 75% will buy one when the cheapest unit is \$100.

The research suggests that a home computer manufacturer can sell 4-5 times as many home computers by positioning them as videotex units rather than computers.

In fact, the majority of those planning to buy a videotex control unit have no interest in buying a home computer:

Among those planning to buy
a videotex control unit...

	<u>Keypad</u>	<u>Keyboard without screen</u>	<u>Keyboard with screen</u>
Don't intend to buy a home computer	80%	65%	57%
Plan to buy a home computer	13	26	34
Already own a home computer	7	11	10

Video Games

The NEHST research does not support the notion that video games will cause videotex services to become widespread. Only a portion of the market shows interest in video games, whereas many more people are interested in videotex.

NEHST indicates that video games will only appeal to a minority of consumers:

- * Only 8% plan to buy a video game
- * 20% already own one

This suggests the game market is already close to reaching its peak - 28% penetration. Growth beyond this point seems unlikely. The majority of homes will not have a video game, and those who want a video game will most likely own one by the time videotex services go into widespread operation.

Hence, using games as a major method of marketing videotex seems unwise. Those interested in games will already have video game units, and receiving games via videotex will only replace or supplement a need they've already fulfilled.

Of course, some of the 72% who don't have or plan to get a video game may well play them if they have them available through videotex.

But it appears that most consumers are much more likely to purchase a videotex control unit for other videotex services rather than for video games:

- * Only 8% plan to buy a video game
- * 52% will buy a videotex unit when the cheapest unit available is \$500. 75% will buy one when the cheapest unit is \$100.

The majority of people who want to buy a videotex unit have no interest in buying video games:

Among those planning to buy
a videotex control unit...

	<u>Keypad</u>	<u>Keyboard without screen</u>	<u>Keyboard with screen</u>
Don't intend to buy a video game	65%	63%	61%
Plan to buy a video game	11	13	11
Already own a video game	26	26	30

**The NEHST
Segmentation Analysis**

Many groups of questions are used by the **NEHST Segmentation Analysis** of consumers:

- * Their interest in getting seven videotex services:
 - news service with intrusive ads mixed among the information pages
 - news service with only information and no intrusive ads
 - special interest information service about one topic: a hobby, business, etc.
 - shopping guide
 - shopping at home
 - banking at home
 - electronic mail
- * The kind of control unit preferred, and whether they wish to buy or rent it:
 - keypad
 - keyboard without screen
 - keyboard with screen
- * The effect of price on their desire to purchase
- * Their reasons for wanting or not wanting various videotex services
- * Their interest in various kinds of information topics, hobbies, and activities
- * Their current media, financial, and shopping habits
- * The other video equipment, home computers, etc. they own or plan to buy
- * Their demographics: age, income, education, etc.

From all of these questions, the **NEHST Segmentation Analysis** searches for any combination of questions which together best explain consumer intentions to purchase videotex.

The Purchase Intention Scale

In determining a scheme for segmenting the videotex market, the computer identifies a group of questions that form a **purchase intention scale**. Each consumer gets a score on this scale. If a consumer is very positive about videotex by consistently answering many questions in a favorable way, he or she gets a high score on the purchase intention scale, indicating a high desire to get videotex. Those answering many questions negatively get a low purchase intention score, indicating a low desire to get videotex. Accordingly, this scale is used to classify consumers into two types:

- * Videotex enthusiasts
- * Those not as enthusiastic

The Information vs. Transaction Scale

The computer also identifies another scale useful in segmenting consumers - an **information vs. transaction scale**. Each consumer receives a score on this scale, depending upon how he or she answers a number of questions regarding interest in various types of videotex services.

Consumers showing strong interest in videotex information services but lower interest in transaction services are scored on the "information" side of the scale.

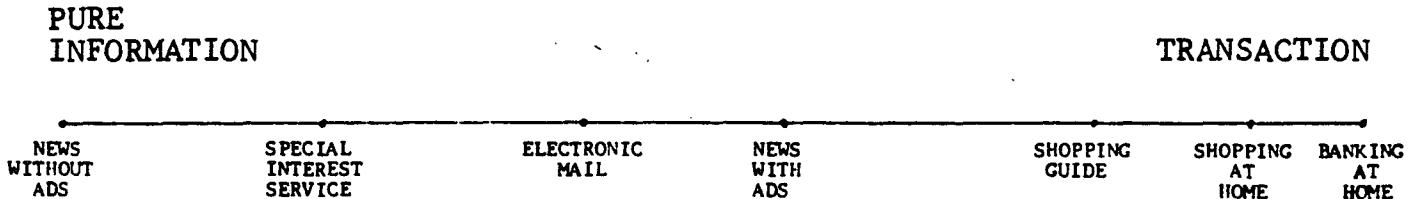
Other consumers showing strong interest in transaction services but not information services are scored on the "transaction" side.

Some consumers are scored in the middle of the scale, because they view "information" and "transaction" services equally. Accordingly, this scale is used to classify consumers into three types:

- * Those interested primarily in "pure information" services
- * Those interested primarily in "transaction" services
- * Those reacting equally to information and transaction services

An unexpected finding of the NEHST Segmentation Analysis is how consumers think of videotex services as being either "information" or "transaction."

Figure 2 shows where consumers position each of the seven services tested by NEHST on the Information vs. Transaction scale:



"Pure information" consumers are those who prefer the services at the left:

- * News service without intrusive advertising
- * Special interest information
- * Electronic mail

These pure information consumers prefer services which offer them nothing but information. They are less interested in services that allow them to make financial transactions, purchase products or services, or see advertising which might assist a purchase decision. Note that electronic mail is grouped with the information services, because it is preferred most by the same consumers who seek information. Electronic mail is viewed as another means of receiving or sending information.

"Transaction" consumers are those who prefer services at the right:

- * Banking at home
- * Shopping at home
- * Shopping guide
- * News service with intrusive advertising

The transaction consumers are mainly interested in services which make it easier for them to use money, either by shopping or banking at home, or by assisting them in finding out where they can spend money through shopping guides or ads. They show interest in an information service having intrusive ads perhaps because the ads make it easier for them to shop and spend money wisely.

The Six Market Segments

We've seen how the **NEHST Segmentation Analysis** reveals two scales used to classify consumers:

Purchase Intention Scale

Classifies consumers into two groups:

- * Enthusiasts
- * Those not as enthusiastic

Information vs. Transaction Scale

Classifies consumers into three groups:

- * Those preferring "pure information" services
- * Those preferring "transaction" services
- * Those reacting equally to "pure information" and "transaction" services

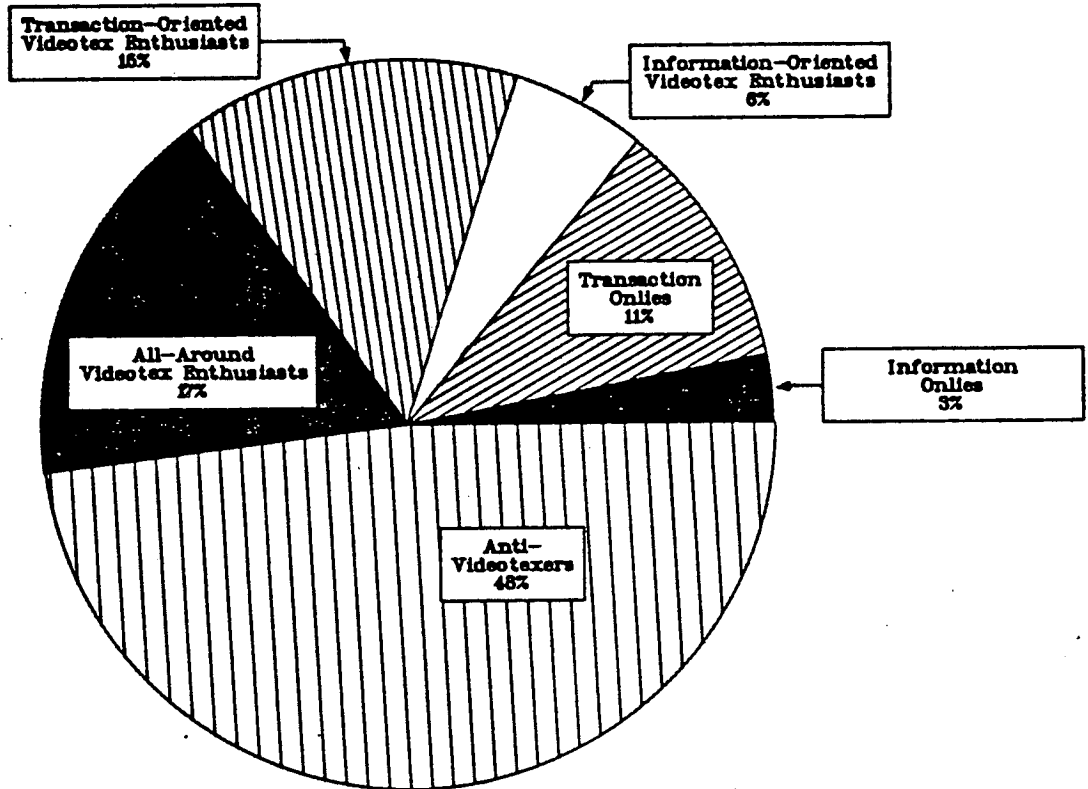
Using **both** scales at the same time to classify consumers, six groups are defined:

- * Consumers who are enthusiastic about videotex in general, and especially prefer "pure information" services, who we will call **Information-Oriented Enthusiasts**.
- * Consumers who are enthusiastic about videotex in general, and especially prefer "transaction" services, who we will call **Transaction-Oriented Enthusiasts**.
- * Consumers who are enthusiastic about videotex in general, and prefer both "pure information" and "transaction" services, who we will call **All-Around Enthusiasts**.
- * Consumers who are not as enthusiastic about videotex, but show some interest in "pure information" services, who we will call **Information Onlies**.
- * Consumers who are not as enthusiastic about videotex, but show some interest in "transaction" services, who we will call **Transaction Onlies**.
- * Consumers who are not as enthusiastic about videotex, and show no interest in either "pure information" or "transaction" services, who we will call **Anti-Videotexers**.

Each NEHST consumer is classified into one of the six groups, depending upon how the answers to many questions result in his or her score on the Purchase Intention and Information vs. Transaction scales.

When all the consumers researched are placed into the six groups, we see how many are in each group, and we can create a picture of the videotex market as in Figure 3:

**The National Electronic Home Services Test
Market Segmentation: Total Market**



All-Around Enthusiasts

All-Around Enthusiasts, by definition, like both "pure information" and "transaction" services. So naturally, when services cost nothing or very little, they buy many services. But when services are most expensive, it becomes harder for them to buy all services. Forced to choose a few services, most of them still get the **news service** more than any other service. This is the one service they want most, regardless of price, as shown in the table below.

The other three pay services do not fare as well. The percentage willing to get home banking drops from 90% when it is free to only 48% when it's \$16 a month. Special interest information drops from 76% when free to 50% when \$16. Electronic mail drops from 45% when free to 25% when \$16.

The figures suggest that at higher prices, All-Around Enthusiasts get a news service plus one other pay service, but there is no consensus as to what that other service is. Some get news and banking, others get news and special interest information, and still others get news and electronic mail.

As you would expect, their interest in shopping guides and shopping at home is always high, since these services are always offered for free.

The percentage of All-Around Enthusiasts willing to get each service is shown among the NEHST groups exposed to the lowest, second lowest, and highest prices:

<u>% of All-Around Enthusiasts getting...</u>	<u>Among NEHST sample group shown the...</u>		
	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Highest prices</u>
<u>Pay services</u>			
News service	95%	93%	82%
with ads	42%	33%	50%
without ads	53	59	32
Banking at home	90	76	48
Special interest information	76	53	50
Electronic mail	45	36	25
<u>Free services</u>			
Shopping at home	93	94	86
Shopping guide	80	90	84

Transaction-Oriented Enthusiasts

They prefer "transaction" services the most, and therefore want banking at home, shopping guides, shopping at home, and the news service with ads.

Banking at home is the one pay service this segment wants most. Their interest in it is strong. Even when it costs \$16 a month, 90% want it.

They show less interest in all other pay services. Many (61%) want the news service with ads when it is free. But this drops to only 43% when it is \$12 a month. Interest in the special interest service drops from 39% when it is free to only 15% at \$16. And hardly any show interest in electronic mail, even when it is free.

% Of Transaction- Oriented Enthusiasts getting...	Among NEHST sample group shown the...		
	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Highest prices</u>
<u>Pay services</u>			
Banking at home	95%	96%	90%
News service with ads	68	49	47
without ads	61% 6	46% 3	43% 4
Special interest service	39	26	15
Electronic mail	9	14	11
<u>Free services</u>			
Shopping guide	92	99	96
Shopping at home	88	97	97

Information-Oriented Enthusiasts

The news service is the pay service they desire most. When it is free, 100% want it. And 90% still do, even at the highest price. As the table below shows, they strongly prefer the news service without ads.

Many also want special interest information, ranging from 97% when it is free to 73% when it is \$16 a month.

And more so than any other segment, this one shows interest in electronic mail. Even when it costs \$16 a month, 54% want it.

Banking home is not as popular. When it is free, 79% want it, but this drops to only 35% at \$16 a month.

% of Information- Oriented Enthusiasts getting...	Among NEHST sample group shown the...		
	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Highest prices</u>
<u>Pay services</u>			
News service	100%	100%	90%
with ads	9%	10%	-%
without ads	91	90	90
Special interest information	97	77	73
Electronic mail	83	66	54
Banking at home	79	38	35
<u>Free services</u>			
Shopping guide	90	93	76
Shopping at home	76	85	83

Transaction Onlies

They show little interest in buying any pay service, except for some who will get banking at home. When it is free, 53% want home banking. This drops to 28% when it costs \$16 a month.

All other pay services fare poorly.

At higher prices, many of the Transaction-Onlies are willing to get videotex, but the only services they want are the two free ones - shopping guides and shopping at home.

Among NEHST sample group shown the...

<u>% of Transaction Onlies getting...</u>	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Highest prices</u>
<u>Pay services</u>			
Banking at home	53%	42%	28%
News service	21	13	3
with ads	20%	13%	3%
without ads	1	-	-
Special interest service	6	1	-
Electronic mail	1	4	4
<u>Free services</u>			
Shopping guide	40	45	63
Shopping at home	21	45	63

Information Onlies

They will buy a news service most, especially one without ads, even at higher prices.

Special interest information is also desired, although not as strongly as news. While 60% want it when it is free, only 35% do when it is \$16 a month.

Some interest is shown in electronic mail, which 24% will buy when it is \$16. However, only a few want banking at home.

They resist shopping at home so much, most refuse to get it even when it is free.

Among NEHST sample group shown the...

<u>% of Information Onlies getting...</u>	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Highest prices</u>
<u>Pay services</u>			
News service	95%	88%	80%
with ads	14%	13%	16%
without ads	81	74	64
Special interest information	60	36	35
Electronic mail	24	15	24
Banking at home	20	6	16
<u>Free services</u>			
Shopping guide	58	38	35
Shopping at home	8	9	-

Anti-Videotexers

This group shows hardly any interest in **any** services, even when they cost nothing.

Some slight interest is shown in buying the cheaper news service with ads.

Among NEHST sample group shown the...

% of Anti- Videotexers getting...	<u>Lowest prices</u>	<u>Second lowest prices</u>	<u>Highest prices</u>
<u>Pay services</u>			
News service	20%	14%	14%
with ads	16%	13%	13%
without ads	4	1	1
Special interest information	13	6	7
Electronic mail	5	4	3
Banking at home	9	3	2
<u>Free services</u>			
Shopping guide	18	14	19
Shopping at home	5	11	16

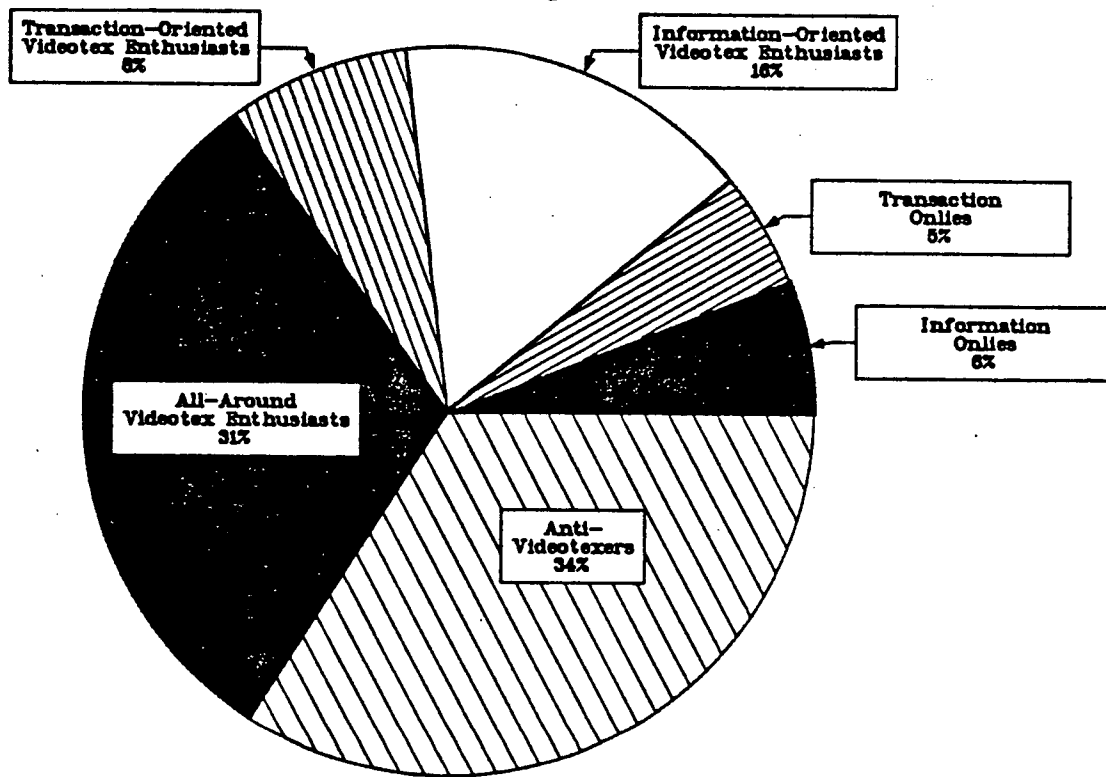
Price Changes The Size Of The Market Segments

Increasing the price of videotex not only causes market segments to purchase services differently, it affects the very size of the segments themselves. As price goes up, some segments get larger, while others shrink.

To see this effect, let us look the picture of the market when all services are free.

Market Segments Among The NEHST Group Shown Lowest Prices

Among the NEHST group shown lowest prices - when all services are free - the market looks like Figure 4:



The **All-Around Enthusiasts** segment is very large. This is only natural, since there are many people willing to get a variety of services when all of them are free.

Another large segment is the **Information-Oriented Enthusiasts** who prefer news without ads, special interest information, and electronic mail.

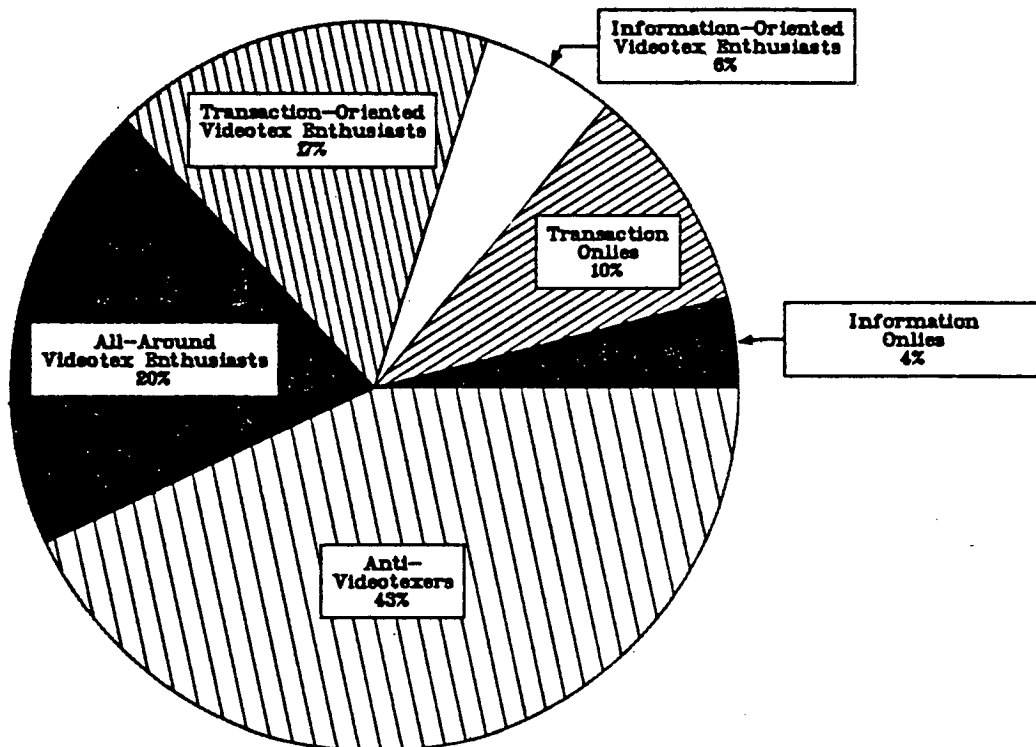
Anti-Videotexers are only about one-third of consumers. This is natural, since when all services are free, there are not as many consumers who refuse to get any services.

Notice how small both groups with a preference for "transaction" services are: **Transaction-Oriented Enthusiasts** and **Transaction Onlies**.

Market Segments

Among The NEHST Group Shown Second Lowest Prices

The picture of the marketplace looks very different among the NEHST group shown the second lowest prices - most pay services cost \$4 each per month. Three groups are smaller than before - the **All-Around Enthusiasts**, **Information-Oriented Enthusiasts**, and **Information Onlies**. The other three groups are larger: **Transaction-Oriented Enthusiasts**, **Transaction Onlies**, and **Anti-Videotexers**, as shown in Figure 5:



The **All-Around Enthusiasts** segment is much smaller - only 20% of the market now that most services cost \$4 each, down from 31% when all services are free.

Much smaller than before is the **Information-Oriented Enthusiasts** segment, now only 6% of the market as opposed to 16% when services are free. The **Information Onlies** segment is also slightly smaller than before.

Getting larger are both groups interested in "transaction" services. Now there are almost as many **Transaction-Oriented Enthusiasts** as there are **All-Around Enthusiasts**. They've grown from only 8% when services are free to 17% of the total market. And the **Transaction Onlies** are now 10% of consumers, up from 5% when services are free.

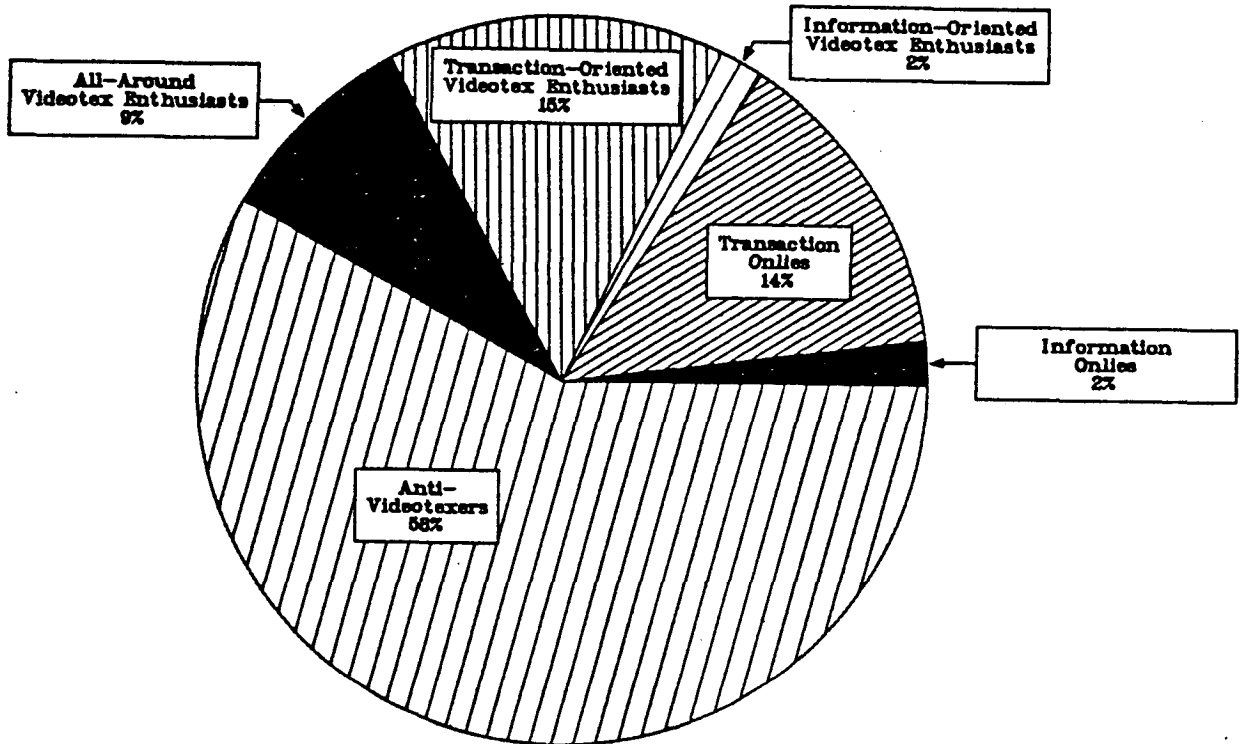
The Anti-Videotexers are 43% of consumers, up from 34% when services are free, because more people reject videotex now that it costs money.

Market Segments

Among The NEHST Group Shown Highest Prices

We can more quickly see the effects of price on segmentation by jumping ahead to the fifth NEHST sample group - those shown the highest prices - most pay services cost \$16 each per month. (If you would like to study the NEHST sample groups shown \$8 and \$12 prices, see Volume I pp. 232-246.)

Compare how different the size of segments are when most services are \$16 each per month, compared to when services are free, as shown in Figure 6:



When most services cost \$16 each, the All-Around Enthusiasts are very small - only 9% of the market - because few people are willing to buy a variety of services. And the Information-Oriented Enthusiasts have gotten so small they are almost non-existent - only 2% of the market - as are the Information Onlies!

The market has shifted towards those segments preferring "transactions". Now the largest group of enthusiasts are the Transaction-Oriented Enthusiasts - 15% of the market. And the Transaction Onlies have grown to 14%.

**HOW TO FIND AND MAKE
CONSUMERS "ENTHUSIASTIC" ABOUT VIDEOTEX**

In targeting at the likeliest buyers, videotex marketers should look for all three enthusiastic segments -- All-Around Enthusiastis, Transaction-Oriented Enthusiasts, and Information-Oriented Enthusiasts.

Demographics

These consumers ...

- * Are **young**, either with young families or single. In fact, 76% of the three enthusiastic segments are under 50 years of age, and 48% are between 18 and 34.
- * Are comparatively **upscale**, with more education and higher incomes. In the three enthusiastic segments, for example, 68% have some college education, more than a third are college graduates, and 58% earn \$25,000 a year or more.
- * **Spend more money** than most consumers do. They use Automatic Teller Machines (ATM's) more than other consumers, write more checks, use credit cards frequently, often subscribe to pay cable, have higher phone bills, and own more video and electronics equipment.
- * Subscribe to **pay cable**, and spend less time with conventional media like newspapers and radio.

The single most important ingredient is the **youth** of videotex enthusiasts. Traditionally, younger consumers are more willing to experiment with new products and services. And as "television generation" consumers, they may be less intimidated by the prospect of television offering services that reach beyond simple entertainment.

Having more education, they may simply be more "aware" of videotex and the related technologies of video recorders, video games, personal computers and the like. And earning larger incomes, they're in a far better position to afford these current electronic and future videotex products.

Videotex also seems to fit neatly into the lifestyles of enthusiastic consumers. For example, they ...

- * Are heavier-than-average users of mail order and phone shopping. Electronic shopping guides and shopping at home services are extensions of these.
- * Already do more electronic banking than most. They may see electronic banking as merely providing another version of banking.
- * Spend more money on their telephones to get and receive (verbal) information, thus making the idea of subscribing to an electronic mail service more acceptable.
- * Subscribe to more magazines; so a special interest information service is a comparatively easy adjustment.

In short, to many enthusiasts, videotex may constitute an electronic extension of things they are accustomed to already.

MARKETING "TRANSACTION" SERVICES

Transaction-Oriented Enthusiasts prefer those videotex services that stress consumerism and facilitate monetary transactions. They have strong preferences for shopping guides because the guides help them find products and services they most want to buy at the best prices. They also prefer shopping at home since it allows them to not only find but to purchase goods. They also are interested in subscribing to information in the form of a news, weather and sports service -- but want it with ads rather than without, thus giving them even more opportunity to locate products and sales. And then to help in paying for all these purchases, they have a special desire to subscribe to banking at home.

Who are these "transaction oriented" consumers? How can you find them in order to target your marketing at them?

The surest clue is current **financial and shopping behavior**. Find consumers who:

- * Use ATM's at least three times a month.
- * Write more than 20 checks a month.
- * Frequently purchase merchandise by mail or phone.

Videotex marketers must develop a special strategy to sell "transaction" videotex services that tap the interests and needs of these consumers.

One key is what can be called "Busy Life Attitudes." "Transaction-Oriented" consumers feel they lead such "busy lives" that they don't have time to shop or bank in person. Much of the shopping and banking they have to do seems to them a frustrating, boring "chore" which eats up time that could be spent on altogether more enjoyable activities.

They believe that shopping at home will spare them from having to drive to stores and stand in checkout lines. They see banking at home as a means of escaping the time-consuming, tedious chore of writing checks and paying bills by mail.

In essence, transactional services let them buy and pay for goods and services more conveniently and in less time.

And, saving time is so important because they also possess what might be called "Good Life Interests." They desire to use their leisure time in the pursuit of enjoying their comparative prosperity. Videotex -- by eliminating routine chores -- is a means to this end. They're especially interested in information and products designed for leisure time enjoyment. Thus, they are motivated to get videotex by the promise of ready access to

information about theatre and restaurant reviews, movie listings, tours and vacations, plane schedules, weather conditions, rush hour traffic and the like. And they want to shop at home for gifts, travel, theatre tickets, clothing and so on.

Videotex marketers should position transaction services as convenience services that let consumers enjoy more of the better things in life. It frees up the time they now spend on tedious buying and banking chores and then helps them get quicker and easier access to those very products and services that will make their leisure time more pleasurable.

MARKETING "INFORMATION" SERVICES

Videotex marketers must craft a different strategy for marketing "information" services.

While "transaction" enthusiasts want to use videotex to facilitate their roles as consumers, Information-Oriented enthusiasts want to use it primarily for gaining knowledge for its own sake. They are far less enthused about shopping, advertising and banking. Thus, they are most willing to subscribe to services that provide electronically published information -- both a news, weather and sports service and special interest magazines. They even want the news, weather and sports service **without** ads. They also are the most willing to subscribe to the service that facilitates the sending and receiving of **individualized or personal** information -- electronic mail.

How can you find these consumers? Look for those who ...

- * Own two or three TV sets.
- * Spend \$20 or more each month on their phone bills.
- * Own two or three phone extensions.
- * Already own or intend to buy a personal computer.

Such consumers are motivated to some degree by the same "Busy Life Attitudes" and "Good Life Interests" that motivate "transaction-oriented" consumers. But, for them, videotex is far less a means to an end (the good life) than an end in itself. And that "end" is obtaining knowledge and the personal satisfaction that comes with meeting challenges.

"Information-oriented" consumers are motivated by what might be called "Glutton for Information Attitudes." They want information. They want more of it. They want it quicker. They are "bored" by conventional media like television and printed newspapers. They resent waiting for the TV news or newspapers, at being at the mercy of television program schedules and newspaper deliveries. They want more information than

conventional media can provide with its objective of pleasing a mass audience.

To such consumers, news, weather, sports and special interest information services offer a desirable alternative, satisfying their desire for instant access to more information that they are personally interested in obtaining.

In fact, these consumers' interests in information-oriented services is motivated by a special appetite for what might be dubbed "challenging" information that provides mental stimulation and tests their intellectual and creative skills. They're particularly turned on to buying videotex by the prospect of electronic games and puzzles, and information about personal computers, business, Wall Street and more technical personal hobbies like photography. To these consumers, videotex may itself, perhaps, represent another "challenge" to be mastered.

We have seen when targeting to Transaction-Oriented Enthusiasts, marketers should position videotex as "a device that makes it easier to attain the pleasures and products of the good life." When targeting at the Information Oriented Enthusiasts, they should position videotex as "a device that makes it easier for people to attain greater intellectual stimulation and satisfaction."

In general, the All-Around Videotex Enthusiasts segment reflects the media and consumer patterns and the motivations of **both** transaction and informational types. They are equally turned on by both types of services. Thus they will be motivated to purchase by either marketing positioning.

OVERCOMING OBJECTIONS TO VIDEOTEX

The reluctant consumer segments -- Anti-Videotexers, Transaction Onlies, and Information Onlies are:

- * Distinctly older than the enthusiasts: 52% are over 50 years of age.
- * Lower on the ladder of education, occupation and income. For example, 46% have no more than a high school education, and 57% earn less than \$25,000 a year.
- * Have less money and spend less on telephone bills, catalog shopping, and video equipment.
- * Bank less, using ATM's and charge cards infrequently.
- * Write fewer checks.

Given their age, they may be disinclined to try new products and services when tried-and-true methods seem to serve well enough. Given their education, they may find videotex services unfamiliar and a little strange. Given their income, they cannot afford videotex services so easily.

Certainly, many "reluctant" consumers feel that conventional sources of information -- printed newspapers, radio, and television -- are adequate for their needs. Many spend less and bank less often than the enthusiasts, so the time and trouble saving advantages of videotex impresses them less. The Anti-Videotexers are so negative about the whole idea of videotex that they may be beyond the reach of most videotex marketing efforts for the near to moderate term at least.

On the other hand, the Transaction Onlies and the Information Onlies have only partial objections to videotex, which can be overcome with a finely-tuned marketing strategy. However, because they will be late adopters, they might best be marketed to after the enthusiastic segments have been reached.

The **Transaction Onlies** are younger than the other "reluctant" segments. A majority are women. Nearly three out of four are married, and most have children, especially young children, at home.

What stumbling blocks motivate these consumers to be "reluctant" to buy videotex?

Their main objection might be called "Not Worth the Money Attitudes." They believe they cannot afford videotex. Many are afraid they "cannot pay their current bills" let alone take on the added expense of videotex. They feel it is not a good value. Most worry that they would use videotex "only once in a while rather than every day" -- not often enough, they feel, to justify the expense. Some cannot see the worth of information services because "having up-to-the-minute news and weather isn't that important...they don't change that often during the day." In any event, most agree that they would get videotex only if they can "save a lot of money" by using the services.

Some Transaction Onlies do show interest in banking at home because electronic bill paying and account balancing offer them the hope of managing their personal finances more efficiently. But most, in the end, feel they cannot afford anything except the "free" services -- shopping guides and shopping at home.

Some buyers may come from this segment, but to get them, marketers must prove to them that videotex services are a good value and reassure them that videotex can help them save money and so lessen their general financial worries.

The **Information Onlies** present a different challenge. For the most part, they are men and older. They are held back from buying videotex by what can be called "Impracticality Attitudes." They are **skeptical** about the ultimate usefulness of the "transaction" services, in particular.

- * They want to see merchandise before they buy -- which may rule out shopping at home.
- * They have only a few bills to pay each month and see no need to change their stamp-and-mail method of paying them. They write comparatively few checks and rarely use charge cards, so they mainly need cash from the bank -- not electronic funds transfer. All of which may rule out banking at home.
- * Many "can't type" and are therefore daunted by the prospect of having to use an elaborate "control unit."

In short, Information Onlies consider videotex -- particularly the "transaction" services -- to be "impractical." Their skepticism involves a certain measure of "discomfort," even fear, about coping with the new and unfamiliar tasks which videotex services require. Information Onlies are more tolerant of the "information" services at least in part because those services are **less unfamiliar** and thus less intimidating. To shift from a televised news program to a televised newspaper may seem only moderately difficult; to leap from a weekly shopping trip to electronic shopping at home may be just too unsettling.

The specific information they want provides a clue to this psychology. They're especially interested in what might be called "Help Me" information: medical and emergency advice, the telephone numbers of government and community organizations, free legal advice, even personal advice of the sort "Dear Abby" provides. What Information Onlies want is help. Because they have difficulty with coping with their day-to-day lives as it now is, the last thing they want is to have to try to cope with something strange or potentially perplexing like videotex.

So, successful marketing to these consumers requires, above all else, an effort to overcome their level of "discomfort" with the technology. What will be needed is an emphasis on the easier-to-use, more familiar "information" services, and assurances that videotex services can make them feel **more** -- not less -- comfortable in their daily lives.

Reymer & Gersin Associates

**Why you'll enjoy
working with
Reymer & Gersin Associates**

We're a highly-specialized marketing research firm.

The only thing we research is people's reactions to telecommunications services, media, and consumer electronics. We've been doing it for fourteen years.

Our 110-person staff specializes in researching...

Videotex information services

- Electronic newspapers and magazines
- Banking at home
- Electronic shopping guides and ads
- Shopping at home
- Electronic mail
- Business videotex services

Broadcast & cable tv

Radio

Telephone services and equipment

Consumer electronics

- TV-related electronics products, including:
 - Home computers
 - Video games
 - Video recorders

We've conducted more research on videotex services and equipment than any other U.S. firm. We've studied how consumers use videotex during in-the-home trials. We've utilized qualitative research to discover the best way to design videotex services. And we've conducted huge quantitative projects such as our 6000-person National Electronic Home Services Test.

We are researching the launch of the first color-graphics videotex system in the U.S., Viewtron®, on behalf of AT&T and Knight-Ridder's Viewdata Corporation of America. Our research is also being used by Videotex Information Corporation for the launch of the first U.S. color-graphics business videotex system, VideoLog™.

Our heavy involvement in studying information services began years ago as an outgrowth of the considerable research we do in measuring how people use television.

A list of clients we have worked for within the past year may be found on the next page. Almost all of our research is custom-designed on a proprietary basis for each individual client.

Firms we've
recently worked for

ABC
AT&T Consumer Products
American Telephone & Telegraph
American Television & Communications
Anacomp
Atari
Atlanta Journal/Constitution
Baltimore Savings Bank
Bank of America
BellSouth
Bell Telephone Laboratories
Bonneville International
Canadian Broadcasting Corporation
Capital Cities
CBS
Centel (Central Telephone)
Century Broadcasting
Chase Manhattan Bank
Chemical Bank
Citibank
Columbus Dispatch
CompuServe
Comsat
Continental Cable
Cosmos Broadcasting Corporation
Cox
Daniels & Associates
ESPN
Field Electronic Publishing
First Bank System
First National Bank of Atlanta
First National Bank of Maryland
First Service Corporation
Florists Transworld Delivery
Gannett
General Instrument
Great Trails
Group W (Westinghouse)
GTE
Gulf Broadcast Group
Guy Gannett
Hallmark
Hearst Broadcasting
Hicks Communications
Home Box Office
Honeywell
International Cable
J.C. Penney
Keycom Electronic Publishing
Knight-Ridder
Lee Enterprises
Lin Broadcasting
Malrite Broadcasting
Manufacturers Hanover Trust
Maryland Switch, Inc.
May Broadcasting
McClatchy Newspapers
McKesson
Meredith Broadcasting
Michigan Bell
Mindset Computer Corporation
Minneapolis Star-Tribune
Morgan Murphy
Mutual Broadcasting
National Assn. of Broadcasters
National Bank of Detroit
National Cable TV Association
NBC
New York Times
Northern Telecom
OCLC
Outlet Company
Pioneer Communications of America
Plough Broadcasting of America
Plus System
Post Company
Post-Newsweek
Pulitzer Publishing Company
Rainier BanCorporation
Rollins
San Francisco Chronicle
Sears, Roebuck & Company
Scientific Atlanta
Scripps-Howard
Seattle Times
Southern New England Telephone
Suburban Bank
Susquehanna Broadcasting
Time, Inc.
Times-Mirror Videotex
Tribune Company
United States Postal Service
Viacom
Videotex Information Corporation
Viewdata Corporation of America
Warner Amex
Wometco Enterprises, Inc.

Confidentiality

Much of our research involves our client's new - and sometimes confidential - ideas. Because almost all of our research is proprietary - designed for one client's special needs - it is an iron-clad rule at Reymer & Gersin Associates that a client's secrets are secret. Period.

We'll be happy to enter into non-disclosure agreements with you to protect your investment in the research data we gather on your behalf. Our policy is to avoid working on accounts which our clients consider to be directly competitive.

A small sampling of projects we've recently completed:

- * Studying reactions among subscribers to the first U.S. commercial color-graphics videotex system.
- * Interviewing executives to learn their views on the future of home information services, public access information services, business-to-business information services, and corporate in-house information services.
- * Studying consumer reactions to telesoftware downloaded over telephone lines.
- * Studying how much electrical engineers will pay for a new videotex business service.
- * Testing consumers' willingness to buy a new microcomputer designed for in-home communications.
- * Interviewing the advertisers on a public access videotex system to see if they plan to continue advertising.
- * Studying how many businesses wish to receive information services delivered via direct broadcast satellite dishes.
- * Monitoring how consumers use home banking during an in-the-home trial.
- * Discovering new types of services that can be offered on cable TV channels.
- * Learning which messages advertising should tell consumers to motivate them to buy home information services.
- * Testing which marketing method will sell a business videotex service best.
- * Researching who will use videotex terminals in public locations.
- * Discovering what type of home computer or videotex receiver people wish to have in their homes.

About our staff

Knowing how to make people reveal their true feelings about any telecommunications medium - especially newer ones like videotex - requires special skills gained only from experience. Our clients have told us, from their own experience, that many general marketing research companies lack the expertise needed to properly execute their projects.

For example, a typical research firm's interviewers are unfamiliar with videotex services and, therefore, naturally have difficulty talking with consumers about them. By comparison, our interviewers have seen demonstrations of videotex services, and therefore find it quite natural to talk with consumers about them. They're specialists in probing people's reactions to videotex, TV, cable TV, radio, home computers, telephones, and other communications media because that's what they do every day.

Unlike other research firms who "job out" portions of their projects to outside firms, we do all our work in-house. We have a total of 110 employees.

Approximately 80 employees work in our AssureData field interviewing division. Because we're able to operate our WATS interviewing facility on two shifts, seven days a week, we can complete even large sample interviews in a matter of days. We regularly work on projects involving as many as 20,000 respondents. And all of our telephone interviews are monitored by a supervisor, assuring greater quality control.

In addition to gathering information through telephone interviews, we conduct focus group discussions, laboratories or in-home trials, mail surveys, executive interviews, shopper intercepts, or innovative techniques such as our Videoquest™, a video questionnaire, or on-line videotex questionnaires.

All questionnaires gathered through interviewing are double-edited by hand in our coding department. Then data is keypunched twice to insure reliability.

Our staff includes two computer programmers who quickly and accurately transform data into client-ready reports using our own data and word processing computer system. We can turn raw data into a complete, typewritten report of tables overnight.

Many of our research projects involve the use of more sophisticated multivariate computer analyses. These techniques allow us to discover important research findings that would go unnoticed if we only relied upon the more routine types of tabular analysis like so many research firms do. Techniques we make regular use of include: factor analysis, cluster analysis, multiple regression analysis, canonical correlation analysis, multiple discriminant analysis, and multidimensional scaling.

While our in-house computers are capable of performing most kinds of analysis, when needed we utilize outside computing facilities at University of Michigan, Michigan State University, and Wayne State University. As a result, almost every piece of commercial statistical software in existence is available to us.

We function as a field service, or a full-service marketing research firm, as you need us to be.

Company principals

Arnold Reymer
President

Has over 18 years of experience in marketing research in the telecommunications and media fields. Before forming his own company, he was Senior Research Analyst with a national marketing research firm. He holds a Master's Degree in Sociology from Wayne State University in Michigan.

Harvey Gersin
Executive Vice President

Involved in broadcasting research for over 20 years, he was Director of Research for the ABC Network News in New York, and provided all ABC affiliates with a local news advisory service, before forming Reymer & Gersin Associates.

Jonathan Beacher
Senior Vice President

Has been involved in researching home information services for six years. He was Vice President of Marketing with Gannett, and worked for three advertising agencies. He holds a degree in telecommunications and marketing from Michigan State University.


Douglas Clemensen
Vice President, Research

Began researching electronic media 11 years ago for Frank Magid Associates, and served as Director of Research for Orion Broadcasting before joining Reymer & Gersin Associates. He is a Harvard Graduate Fellow with a Master's Degree in journalism.

Where we work

While we're headquartered in the Detroit suburb of Southfield, Michigan, we work with clients located throughout the United States and Canada. Recently, we've conducted research in the following cities:

Albany	Los Angeles
Albuquerque	Louisville
Ann Arbor	Madison
Atlanta	Marquette
Augusta	Memphis
Austin	Miami
Baltimore	Milwaukee
Baton Rouge	Minneapolis
Boise	Moline
Boston	Montreal, Canada
Buffalo	Moraga
Calgary, Canada	Nashville
Canon City	New Haven
Cedar Rapids	New Orleans
Chicago	New York, N.Y.
Cleveland	Norfolk
Columbus, OH	Oklahoma
Corpus Christi	Omaha
Dallas	Orlando
Dayton	Pensacola
Decatur	Philadelphia
Denver	Phoenix
Des Moines	Pittsburgh
Detroit	Portland, ME
Edmonton, Canada	Portland, OR
Enid	Providence
Erie	Reno
Evansville	Rochester
Eugene	Sacramento
Flint	Saginaw
Green Bay	San Antonio
Greensboro	San Diego
Greensburg	San Francisco
Greenville	Seattle
Harlingen	Sherbrooke, Canada
Hartford	Springfield, MA
Hattisburg	Springfield, MO
High Point	St. Louis
Houston	Terre Haute
Huntington	Toledo
Huntsville	Toronto, Canada
Jackson, MS	Trois-Rivierer, Canada
Jacksonville	Tucson
Kansas City	Washington, D.C.
LaCrosse-Eau Claire	Wichita
Lafayette, LA	Winston-Salem
Little Rock	

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