LAZYWRITER

Before we get around to an exhaustive study of templates, we can’t resist mention of a couple of nifty products we’ve seen lately. One, Letterform 1000, was presented at Softsel’s recent Softeach and the second we found through its ads, which used the magnificent name of GhostWriter -- since changed to EinsteinWriter. There’s a third, Gold-Letters, which we haven’t actually seen, but which has been promoted in a mass mailing to publications.

All three are designed for the writer of limited imagination or -- to put it more politely -- for those noncreative tasks of requesting an advertised product, condoling a colleague on a loss, complaining to the purveyor of an unsatisfactory service or product, rejecting a job applicant, welcoming a job applicant, and so forth. All three take a simple idea -- one already embodied in books such as "Director’s and Officer’s Complete Letter Book" from Prentice-Hall -- and offer it on-line. It’s about as simple as a safety pin -- and as useful. In the long run, of course, these products will be judged on their style, inventiveness and comprehensiveness, but for now their mere existence is enough. The enterprising user, of course, can extend the collection to form a company library of letters referring to specific company products, services, events and units.

Letterform 1000 consists of 1000-plus documents -- letters and some other boiler-plate -- for $95. It's not a program: It's four standard IBM-format double-sided disks of ASCII text files, readable by most word-processors. Though its vendor, PBL of Wayzata, MN, also sells Personal Investor, resources are a bit limited, so PBL is mounting a clever promotion campaign. Thirty-odd word-processing software vendors have received a copy of the product with an invitation to submit instructions on how to use Letterform with their particular word-processor. These submissions will be included, one to a page, in Letterform’s ring-binder manual. The binder also includes various other handy reference items such as UPS and other freight rate tables (updatable), a punctuation guide, a glossary of computer terms, salutations and closings, etc. Letterform 1000 is just now shipping into stores; Letterform Legal -- 500 legal forms and documents, with the appropriate disclaimers -- is due early next year.

EinsteinWriter, by contrast, is a more ambitious venture, a full-fledged word-processor, with the EinsteinLetters as afterthoughts. They come in four sets of between 100 and 150 letters each: "Social & Civic" for $50; "Consumer & Employment" for $70, and "Business Operations" I and II for $150 each. Released September 1, the word-processor is nice, designed by human-factors experts, but not likely
VIRTUAL INVENTORY: ELECTRONIC DISTRIBUTION OF SOFTWARE

Dear Juan and Alice,

I had a lot of fun at the last Future Computing Forum. Quite apart from the ostensible topic, The Home Computer Market, there was an interesting subtext on electronic distribution of software. Paul Terrell from Romox was there, PR guy in tow, trying to draw as much attention as possible to his new scheme for downloading software to cartridges at retail. Meanwhile, the guys from Xante, a Tulsa outfit that wants to perform before it talks, were trying to look inconspicuous, which is sort of tough if there are five of you and you like to sit together. There was some discussion of the topic by the various panels, too, and I have never heard such a bunch of unenthusiastic, backhanded endorsements: "I guess we'll have to do it, but we're waiting for the other guys," was the tenor of the remarks. They are doing it partly because they hope, partly because they're afraid, that it will work.

Electronic distribution of software seems inevitable now; the only questions are how and when. Electronic distribution makes enormous sense: Why ship bottles of Coke if you can send syrup instead and leave the bulky packaging to local bottlers? Why ship specific boxes, cartridges, disks if you can do most of the work over telephone lines or radio waves? Why carry inventories if you can manufacture them on demand, on site? Clearly, electronic distribution is sensible, feasible, convenient, cost-effective.

But...one man's cost is another man's revenue. Each participant in the software distribution process has a different interest in the procedure, and there are many different approaches. We'll consider some of the issues in the next few pages; profiles of individual ventures start on page 11.

### GOOD NEWS, BAD NEWS

<table>
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<td>Elimination of returns</td>
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<td>Easy updates, fixes, etc.</td>
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<td>Elimination of middlemen</td>
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**How??**

Electronic distribution of software is easy enough. The basic technology is already in place, with phone lines covering the country. Other possible media include the vertical blanking interval in television broadcasts, radio channels, and cable television, which can broadcast digital information for capture by appropriately programmed receivers. Thousands of remote time-sharing vendors and "information utilities" around the country are already practicing a modified,
customized form of software distribution. Modems are getting faster and cheaper, and security systems are getting more effective (as are security-breakers). The sticking points for mass distribution are transmission time, reliability, security, and billing procedures — to say nothing of supplier, reseller, and customer resistance. Each entrant has its own ways of addressing these problems, some so complicated that they may doom the whole effort; others simple and almost foolproof. To address the transmission time problem for retailers, for example, the software is usually stored on-site in encrypted form in a point-of-sale kiosk and copied to the buyer's disk or cartridge on demand; programs are downloaded from a central site on a weekly or other schedule. In the home-delivery schemes, software is generally downloaded in real, slow time — but the programs are usually smaller.

To whom?? Through whom??

Electronic distribution as a means of reaching the retailer and solving some of his inventory problems is a different matter — especially to the retailer — from electronic distribution directly to consumers. Both make intuitive sense, but consumers don't seem to be ready yet. The base of sophisticated users who feel comfortable with modems, telephone dial-up and the like is probably smaller and more saturated than we suspect (despite the well-publicized adventures of some hundreds or thousands of roaming computer hackers who find invading a mainframe computer site more challenging than Space Invaders or Pac-Man could ever be). There are a lot of people out there who still have the phone company hook up their telephones. (Just ask THE SOURCE, which still has only 40,000 subscribers for its data and communications services after four years of trying.)

Consumer reluctance will change over time, but we think it will be slower than Control Video, for one, anticipates; Control Video requires the user to purchase a special volatile-memory modem that's usable only for CVC transmissions. For the moment, the ideal channel to homes is probably through cable television companies — organizations that sell a service, not a product, and that make a habit of installing equipment. Other candidates are the newly venturesome local phone companies. And of course there's AT&T itself, which has just announced a joint effort with Coleco.

In the long run, home distribution will surely succeed in a big way (see page 8), but the tough question now — one that also faces THE SOURCE — is how to get the customer to buy and then sign on with his equipment in the first place. Retailers legitimately claim that they don't just make product available; they sell it. To-home services can advertise, of course, but many software publishers aren't completely comfortable with leaving too much of the advertising to such distributors — or with the risk of annoying their traditional distributors.

Going through retailers makes a lot more sense in the short term — except in terms of pure efficiency. Retailers have fewer emotional hang-ups about equipment and hookups, and more concern for economics, than consumers. Retailers are easier to reach and control than thousands or ultimately millions of pesky, transient, even larcenous consumers. Indeed, distribution through a retailer makes solving most of the sticking points noted above relatively easy.

RELease 1.0, September 12, 1983
Virtual inventory

Moreover, electronic distribution, especially of low-end software, could not have arrived at a more appropriate time. Both publishers and retailers have recently discovered the problem with inventory: It's either too little, in the case of a hit, or too much, in the case of a fading hit or a non-hit. (The recent popularity, among retailers at least, of "rack-jobbing" relates not to the physical service of putting software in racks, but the ancillary commitment of the distributor to take back product that doesn't sell, no questions asked.) Carrying costs, markdowns, shipping costs are huge. ROM production leadtimes can easily extend beyond the end of a selling season. Only 20 of each 100 titles provide 80 percent of the business, but which 20? Most of the electronic distribution systems enable the retailer to carry a wide inventory with no inventory costs beyond the leasing of a machine from the distributor. Prices overall are a little lower, but retail margins are good (especially considering they won't later be reduced by markdowns) -- up to 35%. (Royalties to publishers, as with traditional distribution, are negotiable.)

Tangibles

What worries retailers and publishers is the loss of the touchy-feely sell. If the retailer uses a Super Software Box just like the one in the store down the street, what's to distinguish him? And what's to sell one piece of software over another without distinguishing boxes? So far most of the electronic distributors intend to use their own packaging -- fancy Romox rainbow boxes or Renaissance dwarfs and wizards or Xante stripes -- but we expect that fairly soon they may discover that kids, or at least gift-giving parents, want to take the thing home in the appropriate box. (Remember the Christmas-time practice -- in the good old days -- of filling a Simon box with a raincheck? The box does matter.) There are certainly answers to some of these problems for the retailer. There's no reason there can't still be software demos -- and an "inventory" of empty boxes or display cards which display the back and front panels of the missing boxes. Indeed, Renaissance's offering includes a stand-alone pillar that encourages the user to demo the software before making up his mind. (An "inventory" of boxes that runs out is no problem because the item in question is clearly a hit anyway and doesn't need to be sold.)

At the higher end, the issue is documentation. The whole point of buying a software package is to get away from those dreadful Xeroxed™, stapled reference materials, isn't it? And the whole point of the last two years of bringing in soap merchants is to move from messy typescript to neatly typeset manuals with colors, pictures of screens and other "friendly" innovations. One solution is to print out the documentation -- with a laser printer, maybe, if you're the kind of store that sells Lisas, or a plain old dot matrix if you're a little less high-rent. Of course, there's always UPS or Federal Express Standard Air to send the documentation on demand -- while the retailer stocks just a few of the increasingly popular QuickGuides, EasyStarts and other reference materials. Even games need some documentation, which can be provided either by a printout (games players aren't so picky) or from a supply of prepared leaflets. Indeed, electronic distribution may be an important impetus to the trend towards better, briefer or alternatively, on-line documentation and tutorials.
Which products?? Which customers??

Given the problems with documentation, the need for sales support with high-end programs, and the longer life cycle of business software, most of the early experiments with electronic distribution to retailers -- with the notable exceptions of Softyme and Xante -- will handle primarily ROM-based game software. Another reason is that the inventory problem is worst with ROM cartridges: Disks have shorter leadtimes and at least can be reused, although financing or marking down an inventory of disk software is no less painful than financing or clearing out cartridges.

Most of the publishers signing on to one or more of these services are doing so only reluctantly, more for protection than with enthusiasm. Most seem to regard it as a fine way to make some incremental revenues off old, tired software: If someone wants to resell Hula Hoop Invaders, long out of production, and remit royalties for it, Well, why not? The dogs are selling at discounted prices around $10 anyway, so what's to lose? The publisher gets royalties with no outlay.

But for hits, the feeling is, We'd rather sell it in the old, expensive form (even though that sometimes means out-of-stocks and lost sales in the first throes of popularity). Accordingly, Romox's initial list of items includes a lot of second-tier suppliers and third-tier products. Their publishers see Romox as a good way to achieve "shelf" (or kiosk) space they wouldn't otherwise merit. Announced suppliers include the likes of Creative, Navarone, Mattel (with some of its older items only), 20th Century-Fox, Epyx. No Atari, no Activision, no Imagic. (Imagine the allure of HBO with only the kind of movies you can see on American Airlines.) As usual, the weaker ones are those who will deal, while the stronger ones like things the way they are.

Pricing

Electronic distribution will accelerate (or at least provide an excuse for) the trend to lower prices. First of all, electronic distribution makes it apparent to the user exactly how small the marginal cost of his product is, especially if the documentation is as makeshift as many of the distributors seem to think will suffice. That's on the demand side. On the supply side, electronic distribution will indeed make software cheaper, eliminating some costs of cartridge production, shipment, stocking, returns, shrinkage and possibly printed documentation. (More expensive, reusable EPROMs and E'ROMs will replace ROMs in cartridges, but in smaller numbers.) For a $200 piece of disk software, the savings could amount to $20 to $30. For a $40 piece of ROM software, it could be anywhere from $10 for a hit to more than $40 for a product that doesn't sell and that generates heavy returns.

What happens to those eliminated costs? Given competitive pressures, it's unlikely they'll improve anyone's margins much. Instead, they'll show up as reduced prices. In to-home distribution, distributors and retailers will handle only the occasional pieces of related hardware or media, losing software revenues altogether. Margins may be the same, but there will be less revenue to divide up. In part, lower prices will be made up by higher sales of games. In the business market, the pricing impact will be smaller and the forgone revenues will more likely disappear without compensating unit sales increases, leading the software publisher or retailer to make them up by charging for support (see our July 14 issue) or simply swallowing the loss. An alternative is Softyme's fee-paid-
support approach — with much of the support revenue accruing to Softyme rather than to the publisher or retailer.

From the consumer's point of view, the use of electronic distribution/copying enables him to pay only for the software, reusing the media. For example, a child may (persuade his parents to) buy a hot new game for $40, use it for a week or two, and then abandon it in the toy chest. Now, the child can recover at least the cost of the cartridge and reprogram it, generally for less than $10. In the to-home systems, games cost only pennies per play or are covered by a monthly fee of $10 to $20. While the publisher's and retailer's risks for a new game are reduced by millions and thousands of dollars, the consumer's risk is also proportionally reduced, making him more willing to pay.

The non-electronic distributor's perspective

The traditional (two years, yet!) distributors are putting a brave face on things. For one, there's still a need for physical items -- terminals, disks, cartridges, documentation, packaging, and the like -- that the distributors can distribute. SKU is handling blank cartridges for Romox. Pickwick, which provides rack-jobbing services for Softsel and its customers, also happens to be the largest rack-jobber of blank audio and video cassettes. So why not blank cartridges?

However, traditional distributors may lose the opportunity to provide much of the value-added that provides their margins: product selection (now that the retailer/dealer deals directly with the publisher and lets the customer select the product), inventory financing, stock balancing (a polite term for accepting returns), and timely delivery. A distributor can go either of two ways: He can become a purely physical distribution provider, making sure the retailer has enough blanks and earning a low margin for his pains. Alternatively, the distributor can go the high-service route, as Softsel is doing, with an emphasis on training and eventually relations with corporate end-users. Of course, the distributors could get into electronic distribution themselves: They have the appropriate contacts with both suppliers and customers. They'll just have to forgo those forklifts they're so proud of!

Meanwhile, electronic distributors will usurp more and more of the traditional publishers' and distributors' role, providing advertising, point-of-sale displays and devices, packaging, and even, in some cases, the software itself.

The suppliers

From the publisher's point of view, it's wonderful to have someone go to all that trouble to sell your software, but the rules of economics dictate that they, not you, will get the margin points and profits resulting from their investment on your (?) behalf. Rather than selling their product on cartridge or disk, the publishers will now be licensing it, with the reduction in revenues that implies. At the very least, the electronic distributors will distance the retailers from the software vendors (as do regular distributors); at the worst, the electronic distributors will be competing with their suppliers, although none of Romox's efforts to date could qualify as a hit.

The great offsetting benefit of these systems to publishers is inventory management: If you have a hit, all the retail stores served by this channel will
be your manufacturing sites. If your hit is a dog, you need not worry about handling returns; you just won't get any revenues.

Billing and record-keeping

Billing issues -- the trustworthiness of the electronic distributors' records and the accuracy of their royalty figures -- concern software suppliers more than they like to admit in polite company. Each electronic distributor touts a fool-proof, thief-proof record-keeping system that ensures accurate count of software copied and resold; most people know that all such schemes can be broken, but that there are ways to detect tampering or unusual purchase patterns. In the end, it boils down to the credibility of the participants (you don't need an electronic distribution system to copy software if you've a mind to). Xante, which makes a point of using a Big Eight auditor, is perhaps most convincing on this score; ventures such as The Games Network, which pay fees based on numbers of service users rather than numbers of transactions, sidestep the problem and avoid a lot of cumbersome record-keeping to boot.

The good news for publishers is that they can get a wealth of information (which varies depending on the system used): How long a particular game stays on cartridges before it is erased and replaced; how frequently a particular game is played; customer names and addresses; other customer information such as machines owned, buying plans, etc.; and even, from systems such as Softyme and P.C. Telemart, the most frequently asked support questions.

Piracy

Technically, of course, it's no easier to copy software delivered electronically than any other way. But piracy has never been a technical problem so much as a moral and social one. Accordingly, electronic distribution is somehow likely to encourage piracy if only by 1) showing the possibility of copying, 2) making the product less tangible, 3) in some cases taking away the retailer, who constitutes a person, rather than a machine at the other end of a phone line or airwave, that is being ripped off.

On the other hand, software copied by an electronic distributor onto disks or E-ROMs can be uniquely customized (i.e. identified) by the vendor. Software downloaded directly into a user's computer via a modem with a unique encoded serial number, for example, can be programmed to work only when that particular modem is present.

New channels

The lure offered by Romox, for one, is not just distribution into the same old outlets, but the opportunity to get into new places formerly inaccessible. Romox has a letter of intent from Southland, franchisor of some 7300 7-Eleven outlets, to endorse the system if a seven-unit test currently in progress goes smoothly. Ultimately, electronic distribution may be the only entree into a given chain, which is one reason publishers and distributors are so reluctant to encourage the practice and hand over too much power to these middlemen. Xante, for example, is trying to set itself up as the exclusive distributor, electronic or otherwise, to all outlets of chains such as Sears.

RELEASE 1.0, September 12, 1983
Nonetheless, the balance of power currently rests with the retailers: They have the consumers. The retailer wants no muss, no fuss, true, but he doesn't want to consign his product selection to a single supplier.

Retailers are aware, too, that just like the distributor, the retailer may not always be necessary. Romox's Paul Terrell, for instance, displays an unseemly fondness for video cartridge vending machines that he'd do better to disguise, at least in front of his retailer customers.

**Direct into the home**

As noted, some people are already dealing directly with the ultimate consumer, most notably William Von Meister's Control Video Corp., which offers GameLine, a pay-per-play home system, and PlayCable, which downloads games to cable customers. As noted, the difficulties of reaching these folks may be greater than they appear. So too the intricacies of billing. Publishers aren't too comfortable with the concept, because it relegates them to the role of mere product suppliers rather than marketers. (To retailers, of course, the idea is heresy.) None of these mass-market services as yet downloads the software for keeps (in theory, at least); services which work as a sampling mechanism rather than a selling system are much more comfortable for these publishers to consider. Moreover, this is akin to renting software (the genuine way), and probably generates more revenues over the long term than would outright sales.

Services such as CompuServe and various "home-brew" outfits are also distributing software over phone lines, but without the controls that would reassure most commercial publishers of software.

**Into the hotels**

There's also a contingent of vendors looking to catch the upscale person (the traveler) when he's vulnerable, all alone in a hotel room. One of these, TravelHost, has recently dropped out of the running but the effort is being taken up by its Dallas-based terminal supplier, Quazon; two others, VIDEOTEL and SuiteTalk, are taking dramatically different approaches. SuiteTalk is after the high-revenue, computer-sophisticated guest, and charges the hotel for offering the service; VIDEOTEL is going after the larger mass market that still feels more comfortable wiggling a joystick than (good grief!) typing. VIDEOTEL stresses its "hotel-friendliness" and offers the service at no charge to hoteliers, while HotelTech charges hotels substantial fees, citing the service's ability to distinguish a hotel with high-rent, full-service computer facilities in each room.

**New horizons**

Although it's a little premature right now, with most systems barely operational, what we're seeing are the first few steps towards widespread in-home banking, shopping, and information and communications services as well as games. Sears, through Allstate Venture Capital, owns part of Control Video Corp., which might be considered a conflict given that Sears is a retailer and GameLine goes direct to homes, but Sears is also a huge catalogue merchandiser, a purveyor of financial services (through Dean Witter and Allstate), and a big advertiser. Citicorp, primarily a bank, has been working on a home-banking project for more than three
years now. American Express, MCI...the list of interested parties is long, and many of them are far larger than the current participants.

One thing these new participants will have to learn, however, is to abandon the time-sharing mentality, with its dumb terminals and heavy transmission costs, for brief communications between two intelligent devices. Early efforts at home banking, for example, used the time-sharing model, with a customer logging on and conversing with a mainframe until his various transactions were accomplished. Imagine the load that could put on a mainframe and a telephone system if the service got popular. Even the current networks -- THE SOURCE, CompuServe, etc. -- suffer from the same problem, and cost $20 or more per hour in prime time.

The new model is local software, resident on one of the country's increasingly ubiquitous pcs. The user works with a local program until his checking transactions, for example, are entered, consolidated, and prepared for entry into the mainframe. Only then does he contact the central site with a brief message listing the transactions in a form tailored to the receiving mainframe's specifications. Hence the interest the banks are currently showing in home-accounting software, which might provide an ideal front-end to their home-banking services. Another example is Softyme, where the customer doesn't immediately call up Tymshare with a question; instead he deals with local trouble-report software, which uploads his question in the proper format at the conclusion of the session.

It's clear that electronic distribution of software is on the way, creating more upheaval in the scarcely settled world of software distribution. Few of the services described in the next few pages are in full operation; many more are too preliminary or too shy to mention. It's a chicken-and-egg situation: To get the customers, you need the software; to get the software, you need the customers. But it will happen: The economics make sense. This medium creates a lot of opportunities for old and new players: Tandy, which owns its own stores, is an inevitable participant in to-retail distribution. So is ComputerLand, which is just now making the make or buy decision concerning an electronic distribution system to supply its franchisees. IBM, increasingly aggressive in the software business, already has a network linking it to all its PC dealers, which might be ideal for downloading software to retailers. American Express, which is just about to launch a software catalogue, is taking more interest in this market every day and is ideally positioned to sell direct to consumers. Atari is investigating. The telephone operating companies, which own the channels used by many of the participants, have been freed by deregulation to look for new sources of revenue. The newspapers want to go electronic, and sell more than just news and classifieds.

Distribution to retailers may catch on faster, changing life for software distributors. But in the long run, those who sell software at retail, whether electronically or otherwise, will face the same competition from direct-to-consumer services as the software distributors now face from to-retail services, and they will similarly be forced to transform the nature of their business.
AT&T/Coleco

Just last week AT&T and Coleco made a joint announcement that they would develop "an interactive game and entertainment service for consumers" -- and then refused to answer any questions. Exactly how this service will work is unclear, and probably Coleco and AT&T aren't really sure yet either. The part of AT&T making the announcement, AT&T Consumer Products, is a manufacturing division; it doesn't even own the Phone Center stores that cover the country, and to whom (along with Sears and J.C. Penney) it would presumably sell some of the products (probably modems) that would be its major initial contribution to the joint venture. (AT&T has also apparently made some significant breakthroughs in the sort of synchronization needed for remote interactive game-playing.) But at least the Phone Stores are owned by AT&T; the telephone lines, which would presumably get good usage from this service, are now owned by the divested operating companies. However, such a game service might be a good way of getting AT&T's modems into consumers' hands, providing a nice base into which the company could also sell the videotex and other such services it is developing.

Coleco, for its part, would probably be in charge of providing game software and computers, although the press release implies that the service could be used with most varieties of video games or home computers -- a wise decision.

We will watch the progress of this effort with interest.

Control Video Corp./GameLine

Founded by William Von Meister and funded by an assortment of venture capitalists including Kleiner, Perkins, and Allstate, Control Video plans to start by distributing games on a pay-per-play basis and then move on to other in-the-home offerings such as BankLine.
SportsLine (recorded sports events) and BuyLine (home shopping). We also expect soon to see CVC offering a genuine software distribution scheme, using personal computers as opposed to video game systems, and allowing protected software to be stored on users' local disks. The system goes directly to consumers over phone lines from CVC's central computers, bypassing the cable operator middlemen most game services currently use.

GameLine requires the customer to buy a special $60 (retail) Master Module modem to attach to an Atari VCS, to be used only for the CVC services; he also pays a $15 one-time sign-up fee. Game sessions (6 to 10 plays) cost $1; phone calls are local, hooking into inward WATS or CVC's own data distribution network. The user has only volatile memory (plus some ROM), thus obviating the threat of software piracy. The user has a special ID number and credit limits set by the bill-payer (read parent); he pays through his credit card account. His selection of games is limited only by GameLine's ability to find suppliers; so far, the roster includes Imagic, 20th Century-Fox, Tigervision, SpectraVideo, and the defunct trio: Data Age, Apollo, and U.S. Games. There are ancillary services too: a monthly guide to what's available, contests, and other little extras.

Publishers (or publishers' creditors) get a straight 15% of CVC's revenues attributable to their games, plus a de facto sampling service (which is a little less compelling than with the cable services since games don't suddenly go off the air). The retailer gets margins from terminal sales plus 2.5 percent of the revenues generated by the units he sells; each unit has a unique serial number so that the central computer system can keep track automatically. Moreover, each time a game is over, the system displays a message, such as "Did you enjoy playing Starstruck Invaders? You can buy it at Computer Confusion," touting that retailer's services.

So far McLean, VA-based Control Video has shipped to retailers about 40,000 modems, of which 3000 have sold through and are in use. Experience so far is encouraging, with use and revenues, about $24 per month, about four times what was expected. But of course the first few thousand users may well be atypical fanatics. And will their initial enthusiasm, fanatics or no, soon wear off?

CVC's Von Meister expects to have 250,000 terminals in operation by Christmas, and if the revenues and controls also hold up the service should do very well by investors. However, Von Meister has already been involved in a number of such projects, most of which have been acquired by larger companies with deeper pockets. Of these the most notable, THE SOURCE, has had a lot of promise for more than four years now.

**HotelTech/SuiteTalk**

Cleverly named, HotelTech's SuiteTalk has already generated considerable publicity. It will go live this December in 450 rooms (out of 1450) at the Dallas/Fort Worth Amfac hotel. The San Francisco company was co-founded by Susan Martel, a long-time hotel industry
long-time hotel industry consultant. Each hotel's SuiteTalk system is managed by an IBM PC-based system, "the Concierge," which costs the hotel $1000 a month and which handles downloading and control of guests' 6502-based units, which cost the hotel $30 per month each. The Concierge supplies each room with a "free" bulletin board service of room service menus, shopping guides, hotel services, events, and emergency information; for the cost of the phone call, the guest can use it to reach his own home or office computer. Beyond that, there's a $9 to $20 hourly charge for connection to airline schedules, stock prices, electronic mail, news, etc., which are mostly network services resold by HotelTech, and downloading (for use, not storage) of business and game software. In essence, the guest is using the terminal to access the HotelTech network system (delivered via Tymnet) and is billed directly by HotelTech on the credit card number he supplies, rather than through the hotel. (The hotel gets a commission, of course, and the software and services providers get royalties.) From what we can tell, there's no reason that the savvy guest can't use the system to access most of the outside services directly (under the guise of "calling his home or office computer") and deprive HotelTech and the hotel of their commissions.

INC Telecommunications

McLean, VA-based INC Telecommunications, a joint venture between National Information Utilities (a holding company for local information services) and troubled National Public Radio, is the brainchild of Jack Taub, founding investor of THE SOURCE. His idea is to use NPR's satellite for nationwide distribution of software (and other information) to radio stations; the radio stations will complete the last leg using FM subcarrier channels. Subscribers will rent from NIU (there are no local services yet) a little black box programmed to receive only specified, paid-for transmissions, which they can then record automatically on their pcs. (The black box currently costs $250, although a major semiconductor maker is working on reducing that cost by an order of magnitude.) A couple of states' school authorities have already signed up for the service, due to start this winter, says Taub; distribution of commercial software will come later. However, we suspect that the security problems of this approach, and NPR's own problems, will limit it to public-domain and public-domainish kinds of products; we can't see VisiCorp sending VisiCalc IV out over the airwaves.

P.C. Telemart

P.C. Telemart is using its PC Clearinghouse Software Directory as the basis of an electronic demonstration, evaluation and ordering system currently in test by retailers in the Washington, DC, area. Next week, a further 50 test kiosks will be placed into service, allowing store customers access to 40 megabytes of data stored on a 70-megabyte system at PCT's Fairfax, VA, headquarters. Assuming things work out, the company says, it has 900 stores under contract.
Unlike most of the systems described here, PCT's doesn't actually download the software (although it can provide demos); it gets delivered the regular (physical) way (via Softsel or other distributors) to the store a few days later unless the store happens to have it in stock. The store pays $500 or $2000 per month for the service, depending on whether he stores the data base locally or accesses the files maintained by PCT. That data base, covering 40,000 mostly business programs with evaluations of 6,000 of them, is PCT's primary allure.

P.C. Telemart also provides software support at $25 a question (billed on a credit card and available to anyone, purchaser or no, with $5 going to the retailer involved). The company is starting small, not publicizing the service for fear of getting swamped. The aim is to create a data base of support question answers: Currently, says founder Larry Stockett, the man who designed the showcase "paperless office" at the Watergate, the company can answer 40 percent of the questions it gets right away; it wants to build up a data base of answers to 80 percent of them before it goes after such business aggressively.

P.C. Telemart went public last August at $5 per share, raising $4.5 million for one third of the company. The stock is now trading around $6.

**PlayCable**

PlayCable is a joint venture between Mattel and General Instruments, whose Jerrold division makes cable TV equipment, including a module that turns Mattel's Intellivision into a terminal for PlayCable's downloaded games. After a series of tests, PlayCable was launched two years ago, but it has failed to meet its own goals. About eight cable operators (a total of 20 cable systems) have signed up for the service, representing a potential market of fewer than 1 million people (or 4 percent of the US cable audience); of those million people, fewer than 5 percent, or 50,000, are actually buying the service, which costs them $8 to $13 per month for unlimited play — but limited to Mattel games. (The cable operators keep about half this amount.)

Why so slow? The reason is probably first and foremost the necessity of purchasing an Intellivision plus the Jerrold attachment. Prices have come down in the past two years, but there's still the necessity of trekking to the store... And who wants an Intellivision nowadays? Nonetheless, Manhattan-based PlayCable may simply have been a couple of years too early and have chosen the wrong console. Video games installed now number about 12 million; clearly it's easier to get people to buy them. The choice of equipment and limited software remains a problem, however, but one that could easily be solved by a universal (or at least less limited) adaptor. The company says it is considering its options.

**Renaissance Technology**

Renaissance Technology is a Concord, CA-based outfit that has interests in distribution (Eagle, NEC and Columbia Data computers), manufacturing (PC add-
ons, a nifty hand-held personal digital scope -- no engineer should be without one -- coming out this fall), and games design (as a supplier to various large games manufacturers). Its principals, Glenn Baylor and Vic Ivashin, originator of the VIC-20, used to work together at Commodore along with Dennis Barnhart, the late president of Eagle. Their concept is similar to that of Romox, but a little higher-tech, a little higher-class, and a little less ambitious. It focuses on the video games market (an estimated 100 million cartridges in 1983), at least for the moment. But the technology will work equally well with computer cartridges.

Renaissance's technology involves the use of E²ROMs, electrically erasable ROMs, in glued-shut cartridges. A little more expensive than regular old EPROMs, selling for $8 or $9 in quantity vs. $3 to $4 for EPROMs, they also last longer, and can be personalized for software security or any other purpose. A family, for example, could record its medical history or financial statements on such a cartridge. (However, pricing is discretionary, and Renaissance is selling its cartridges for $40 (list) with one less-than-hit game included.)

Renaissance's system, to be handled by a subsidiary called Reflections, will have the customer take his cartridge to a salesclerk, who will load it with "points" -- for about $2 per point. (Using a "die-trace" capability unique to E²ROM supplier SEEQ Technology, the clerk can also record the name of the store, the date, or whatever other information the store may wish to encode. All this information is invisible to the consumer, but can be easily read by Reflections's master system.) The customer then takes his cartridge, loaded with points in the manner of a bank's smart card, to the Reflections unit across the floor. There he can sample games to his heart's content (or at the store manager's sufferance) before committing to a single one for a certain number of points. As it programs the customer's cartridge, the system will deduct three to six points ($6 to $12 per game), perhaps leaving him a balance for next time.

Strictly speaking, Renaissance isn't in "electronic distribution," just electronic manufacturing. Its founders initially wanted to use phone lines for downloading but decided that was an unnecessary technological veneer. Instead, they distribute the games and E²ROMs physically (Renaissance distributes software and hardware to some 900 dealers), for storage in the Reflections system master, which holds up to 120 different encrypted items. Games don't turn over that fast, after all. Accounting information is collected in a cartridge periodically picked up by a rep.

Reflections is gearing up for a launching in late October, with an initial purchase commitment of 2 million E²ROMs (subject to success with the first 100,000) already in production over at SEEQ. Initial distribution will be in the western US, territory familiar to Renaissance through its distribution business.

Romox

Romox, named to sound suggestively like Xerox, is the furthest along of the to-retailer schemes, with live tests at several Longs Drugs and 7-Elevens, and an Emporium Capwell and a Kmart this month in San Francisco's East Bay area. The aim is to have 1300 terminals on lease by December 31.

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the Campbell, CA-based company has been slowly seeding its market over the past
year with $45 (list) game cartridges cleverly disguised as games. Rather than
sell a concept that didn't yet exist, Romox simply sold about 120,000 of its own-
brand games inscribed on its patented ECPC™ (edge connector programmable
cartridge) EPROM cartridges that can now be erased with ultraviolet strobe light
and inscribed with new games by the Romox retail terminal. The test terminal has
separate ports for the Atari 2600 VCS, and the Atari 400/800/1200XL, Commodore
VIC-20, and TI 99/4A home computers; the production will handle those plus Mattel,
Coleco and Timex/Sinclair. There's one extra slot -- for the Peanut, perhaps?

The Romox retailer system consists of a black box to erase the cartridges and an
IBM PC POS terminal managing a hard disk which contains several hundred games in
encrypted form. (Software Emporium, president Paul Terrell's previous venture,
had only 650 SKU's (stock-keeping units) in the entire store, he points out.)
These games can be downloaded, with the turn of a salesman's key and the indelible
recording of a transaction, onto a customer's erased cartridge. Alternatively,
the customer can purchase a blank for $15 to $25. The documentation, such as it
is, comes in a free catalogue which is updated monthly. The system is simple,
manageable, and in keeping with the sort of mass merchandiser Romox is going for.

The software enters the retailer's Romox system through a weekly downloading of
encrypted software, and accounting data are transmitted back to Romox the same way
using telephone lines. Each terminal costs Romox about $3400, and is leased to
the retailer for $225 (one-year term) to $160 (three years) monthly. According to
Romox, each transaction is indelibly recorded, ensuring that publishers will be
paid their 30% of list for each copy of their software that is made. The retailer
also gets 30% off list, and he is free to charge what he likes (as per the FTC).

Romox was founded last year by president Paul Terrell, who also helped launch Byte
Shop, Exidy/Sorcerer, and Software Emporiums, a "chain" of two software-only
stores. Other founders include Dan Izumi, head of R&D, who has worked for
National Semiconductor and set up Toshiba's US operations, and Arturo Carlos, who
runs Romox's assembly operations in the Philippines. The company is currently
looking for venture capital. As the first of the systems to go live, it has a
strong position.

Servnet/NABU Manufacturing

Alexandria, VA-based
Servnet is a joint
venture between NABU
Manufacturing of Ottawa
(Canada) and Citicorp,
Tribune Cable, Artech,
Warner-Amex and a number
of other cable-minded outfits. The NABU system, which has just started
production, allows a cable operator to download several tiers of information
separately over a single cable channel. Then this information -- or software --
can be picked up on a selective basis by anyone whose cable terminal is so
authorized.

Servnet plans to provide games and other services to cable companies with service
starting in the Washington area this winter. The company intends to concentrate
first on providing games and other software on a rental basis ($5 per month per

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"tier"), although it can see delivering them on a pay-per-view (-and-record) basis eventually. With proper security, the customer could then offload the program and store it on his own disk. Although the system is higher-end than PlayCable, it suffers from some of the same limitations, requiring the user to rent (for $17 a month in addition to cable charges) a no-brand CP/M micro. The typical high-end user the system is targeting would probably rather buy a Peanut....

Servnet's first four tiers will offer educational games, games (including Pac-Man under a license direct from its Japanese originator Namco allowing electronic distribution only), business, and education with Logo. There will be about 20 programs to a tier. Eventually Servnet plans to offer data bases from people like THE SOURCE and CompuServe on the same downloading (rather than truly interactive) basis. Servnet also plans to be an aggressive purveyor of advertising, even going so far as to program it into its games: Tennis game backdrops, for example, might carry the logos of soft drinks or tennis apparel.

Softyme

Softyme is unusual among the outfits discussed here in that its raison d'être is less pure distribution than the value-added part of distribution -- on-line support, help with product selection, etc. The system was conceived under the auspices of Tymshare, a traditional vendor to service-needy corporations where distribution consisted of a salesman hand-delivering tapes or remote time-sharing backed up by extensive technical support. For Tymshare, there was a pressing question (one that it should have addressed much sooner): How do we keep our customers now that they can get and use micros all by themselves? It soon became apparent that users could get, but could not use, micros by themselves. So the second question became: How can we automate support?

After its incubation at Tymshare, Softyme split off late in 1982 and is financially, though not operationally, independent. Basically, San Francisco-based Softyme has created and owns the retail-end software -- demos, sales transactions, question formats, menus, etc. -- and runs the support center, while Cupertino-based Tymshare runs the software repository and network facilities and does field service on the equipment. Softyme will buy the Tymshare/Tymnet services in bulk, and offer them to retailers. Testing is just starting now in the Bay Area, and will continue until a planned full rollout next June. Publishers, which the company won't identify yet, get competitive royalties, based on the level of support provided and the usual market factors (i.e., it's negotiable).

The retailer gets a kiosk for downloading of software -- using Tymnet facilities and the phone company's 56Kb lines (which represents the difference between one minute and five for downloading, counterbalanced by a significant technological risk). But first the user/customer must go through a series of qualifying questions: What are his name and address? What kind of equipment does he own? What does he want to do: spreadsheets, word processing, etc.? He may select a specific product from a menu, then see demos, excerpts (strictly favorable) from independently published reviews, specs, etc. If he buys, the software is downloaded in real-time onto disk(s). Documentation is usually supplied from an
inventory kept by the store (and supplied either through Softyme or through the publisher's regular channel), with mini-manuals printed out at purchase. Documentation for less frequently purchased products such as vertical market programs will be sent directly to the customer.

After a purchase, the customer is encouraged to come back to the store to use the system for questions (as long as he's paid a support fee, probably in the neighborhood of $100 yearly), further purchases, etc. The system's hard disk holds the answers to the 20 most-asked questions for each package plus a bulletin board of updates, etc.; the rest of the questions are uploaded to a tech support center manned by Softyme. The customer is then contacted by phone or modem within 24 hours with the answer. Alternatively, a customer with a modem can stay at home and go directly into the system (which checks his payment status). The retailer will make a margin of roughly 40% on the software (off list) and 30% on the service contracts; he will pay $6,600 for the system in year one and about $5,000 per year thereafter.

The Tymshare half of this joint effort will offer similar services (without the retail flavor) to large corporate customers and institutions. (Not shown in the diagram.)

We like this approach, although we imagine that a lot of publishers will think it doesn't leave them much to do (akin to an OEM contract with a hardware vendor). On the other hand, if they were already doing it, there wouldn't be the market for this kind of service that so clearly exists. (See our discussion of telephone support in the July 14 RELease 1.0.) Softyme -- or indeed any other business-oriented electronic distributor -- also provides an ideal channel for distribution of templates, upgrades, bug fixes, vertical market packages and new releases.

The Games Network

The Games Network, based in Los Angeles in the old Otis Chandler mansion, is rapidly gaining both suppliers and potential viewers, whom it will reach by selling a monthly-fee unlimited-play games service for resale by cable operators. After an initial test in Fullerton, CA, last winter, the company has gone into a gestation period and is signing up cable TV operators to redistribute its service to consumers. It currently has Rogers, ninth largest in the U.S. with 733,000 subscribers, and several others, and seems to be about to wrest Group W, with 1.9 million subscribers, away from Mattel/Jerrold's PlayCable. (One advantage is that TGN's own console contains a microprocessor and 64K of RAM, so that a separate games unit is not necessary; and other is the greater variety of software.) TGN will start up regular operations sometime this winter.

Software suppliers include Broderbund, Spinnaker and other disk-based home software vendors. For the moment, most of the software is games (including a cribbage game that was popular in test and brought in a new, older-aged market), but TGN will gladly supply whatever the market wants.... For the software supplier, TGN is a terrific sampling device that encourages purchase: The customer, once hooked on a particular game, has to buy it when the monthly selection of 20 items changes. Better yet, the publisher even gets royalties for
promoting his games through this marketing outlet. The Games Network is the closest thing to "games radio" or MTV available. Finally, publishers are especially excited, since the test found that a substantial number of women were playing the games -- a whole new market considering that the vast majority of game software is purchased by men and boys.

For the viewer/player, the system is a game service that allows unlimited play of a rotating selection of games for about $15 per month, plus a $20 to $50 unit installation fee that goes to the cable operator (who leases the customer console from Amecom, a firm owned by several TGN principals, which pays TGN a $10 royalty for each console placed). And finally, for the cable operator, who keeps one-third to one-half of revenues, the service presents no more billing problems than any other channel of news, sports, movies or other entertainment. In the long run, it may be the beginnings of home banking and all those other services.

The Games Network is public, having raised $3.5 million in a public offering last month. The stock was sold at $2 and is now trading around $5.50 per share, valuing the entire company at $36 million.

VIDEOTEL

VIDEOTEL, as one would expect of the creation of a couple of consultants (plus two techies and one marketer), has a well thought-out plan to reach the in-hotel market. The system relies on a master computer that is stored out of sight somewhere in the hotel and downloaded from VIDEOTEL as needed. Most of the system's software is resident on this host, obviating the heavy use of telephone lines. Individual guests get into the system through a proprietary Z80-based diskless computer, linked to a local area network of VIDEOTEL's own design which uses the hotel's internal cable facilities (not its telephone facilities).

The fee structure is simple, which is one reason we expect it to work: $5 per day, payable through the hotel. For that the guest gets unlimited game-playing (with games from 14 suppliers including Broderbund and Sierra On-Line), airline schedules, weather, local events and entertainment, and hotel restaurant and room-service menus and whatever else the hotel wants to promote. (Keep that guest on the premises! is the hotelier's first commandment.) Ultimately the service should include up-to-the-minute stock prices (taken off the air, we expect, in order to leave the hotel's own facilities free), a keyboard, external communications (extra charge for phone use), etc. For the moment, guests simply make their selections off a menu with a joystick -- a nonthreatening procedure even to an executive of the most rarefied rank.

Tests are starting October 1 at three Boston-area hotels near VIDEOTEL's Woburn headquarters. For the hotel, the price is certainly right: nothing -- plus a 10% commission just for letting VIDEOTEL install the system. Rather than work hard to sell the idea to hotels, VIDEOTEL hopes to make it up on volume and end-user revenues. In the long run, advertising revenues, from airtime sold by VIDEOTEL to local or national advertisers, should also contribute, but right now VIDEOTEL lacks the manpower to chase all the opportunities. Funding, however, is no problem, with $1 million from Boston Hambro, Citicorp Venture Capital, and Venture Founders. (The company expects to raise another $2 million or so in December.)

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Xante Corp.

Xante is a purposely mysterious company based in Tulsa and funded by family bottle-making and oil-and-gas businesses. Of the companies we've explored it's the most ambitious besides Softyme, and certainly the most thoughtfully set up. It already boasts a Big Eight auditor, which should reassure its software suppliers of the accuracy of its sales information (and their royalty checks), is setting up a nationwide service network, and has spent over $1 million on development and hired more than 30 people. Xante plans to handle both cartridge and disk software, but its value-added will be of the merchandising rather than the support variety. As noted above, Xante is going after the classy merchandisers -- chains, department stores, etc. -- and aiming to set itself up as their exclusive software supplier.

Overall, Xante certainly requires the most commitment from its retailer customers. Its delivery system will cost each outlet roughly $15,000 -- to be paid upfront or financed by a third party. Although the plans aren't yet firm -- testing is just starting this month -- Xante intends to provide up to 10 pages of printed-out documentation (with color soon), labels, display cards, demo capabilities, and other sales support. (For higher-end products, more extensive documentation is to be inventoried by Xante and mailed to the customer the day after purchase.)

Because Xante will download software from local Xante facilities only at the time of purchase, the Xante system will be more secure, both in perception and actuality, than much of its competition. (The disadvantage of this is high facility costs for Xante, which must grow rapidly to offset enormous front-end costs.) Aside from security, this enables Xante to offer a virtually unlimited inventory, even of memory-intensive products. To offset the time-of-transmission problems, Xante suggests that a retailer can download a couple of copies of fast-selling products during a slow period; that limited amount of inventory is manageable.
NICE NICHE

Are you tired of hearing about the next new PC-compatible system, the latest new challenge to WordStar? Fortunately, there are a few people with better -- and more original -- ideas:

Call Me Cygnet

Cygnet's CoSystem is probably one of those great ideas that will suffer from being first: Its successors are likely to be lower-priced and fuller-featured. Nonetheless, semiconductor refugee Federico Faggin (the founder of Zilog, whose chips inhabit the CoSystem) has a nifty idea, and a nifty marketing pitch: It's the other half of your personal computer. Basically, the CS shares your PC, taking control of it on command and letting you do the usual phone-management things -- auto-dial, electronic mail, call-accounting -- and then returning you without a glitch to whatever application you were working on. Messages composed on the PC can easily be sent out to a mailing list, and phone conversations can be carried on while you transmit your screen display to the other party so that you can discuss the document, spreadsheet, diagram or whatever with the other party and you both looking at the same thing. The entire system will be distributed at retail, and will cost $1495. If you were wondering, yes, we'd love one for Christmas.

Workslate -- For the Non-user

We all know about vertical marketing, software designed for certain kinds of customers. With the advent of Convergent Technologies' Workslate, we're getting a glimpse of niche hardware. The Workslate is aimed at the professional who doesn't normally use a personal computer, who doesn't think in rows and columns, fields and records, or anything else that fancy. He just wants an electronic notebook for his expense accounts, appointments, memos, phone list, to do list, and so on. The metaphor of this machine is not a desk, but a messy pile of paper anchored by a desk calendar and an alarm clock.

The product graces the cover of the American Express Christmas catalogue, which likes its high-class look. On the other hand, Macy's among others is unsure about the product because of its button-like typing keys. Convergent will have a Wordslate for the typists among us sometime in 1984.
Commodore slips in shipping disks. Commodore's 64 is a hot item now, rapidly upstaging its 1-million seller the VIC-20. This is no mere game machine; demand for the accompanying 1541 disk drives is high. The problem was compounded, we hear, when a freighterful of disk drives finally arrived at a West Coast port last month: They were built to European specs and unusable in this country.

IBM Means Software! IBM has just certified Software Centres International, the ComputerLand of the software-only world, as an IBM PC and XT authorized software dealer. IBM seems to be doing something about its long-held perception that software matters. We also expect to see the company become more active in the sponsorship and distribution of third-party software, to the extent that major publishers will face the tough choice of signing up with IBM or suffering the onslaught of its competition.

Tax Warning Under Internal Revenue Code 127, employees are not taxed on the value of job-related classes and training materials paid for by an employer. However, this exemption is due to expire on December 31 unless it is extended. General sentiment seems to be in favor of the extension -- as it should be -- but there's a danger it might be forgotten in the press of business. So write to your Congressman! (For further details, you can check with ADAPSO's expert legal staff, Mary Jane Desrosiers, at (703) 522-5055.)

Happy Birthday, David Cole! September 24 is the day.

* * * * *

Did you receive your August 5 Release 1.0? If not, please let us know. Several copies were lost in the mail. Call Rona Levine at (212) 586-3530 if yours is missing.

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