Overview of pricing strategies in the electronic information industry

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This overview is driven by a search for workable applications of pricing strategies across the entire electronic information spectrum. The underlying assumptions are that the industry is increasingly global in nature, propelled by the use of multiple media to multiple niche markets with multiple products. Since information distributors strive to carve unique markets, the idea is to beam information-based products to as many markets, and thus vendors, as have need for comprehensive data. One-stop shopping is key.

Seventeen of the top 25 electronic information vendors have a transactional component at the heart of their service. Dun & Bradstreet's DunSprint and DunsVoice, the number one North American service with electronic revenues of $417 million in 1986, has loan decisions. Number two, Sabre from American Airlines ($383.6 million in 1986 information revenues) has ticketing with huge additional revenues for airline travel. OCLC's revenues of $78 million in 1986 as number 15, has interlibrary loans and the giving and taking of catalog cards as its chief ingredients for existence.

The field is vast, although three super markets – credit, traditionally number one now slotted to the number two position by vertical markets/operational that monitors the operations of specific niche industries, and financial and economic information services – have nearly 75% of the electronic information business. Far behind is marketing and media with 13.9%, legal and government with 5.6%, news at 5%, and scientific with 2.8%. All are growing nicely at a compounded annual growth rate of 13.9%, except credit and vertical markets/operational which are well-established and heavily saturated.

Pricing the individual products within these lines of business is one of the most complex issues facing information providers/publishers and distributors today. Compounding the problem is the fact that products are generally nested within a line of multiple-media delivery systems: print, microfilm, magnetic tape, online interactive, voice/audiotex/broadcast, and interactive offline media, including the newly-emerging CD-ROM.
Rule Number One: price as a line of goods, not as a basic database with spin-off products based on incremental revenue.

Vendors and information providers have been burned by embracing the incremental revenue route unless markets and customers are very well understood and revenues for the different media are predictable. The very attractiveness of the electronic utility environment that offers personalized, customized applications complicates pricing issues and choices. What is the worth and how do differing markets perceive the need for such compatible services as downloading, applications programs (to mix internal or proprietary data with external, publicly-available data), electronic mail & messaging coupled to local and/or wide-area networks, selective dissemination of information, computational and analytical software with word processing for customized reports, gateways, expert systems, or transactional services?

Vendors contend with a mix of publishers whose wares vary in content and value, have a choice of delivery channels or media with different costs, plus significant operating expenses for software, hardware, maintenance, and communications expenses. Both vendors and publishers face the costs of sales and marketing, training, general and administrative. Information providers have to be paid for the expenses of collecting, organizing, verifying, editing, and packaging the information; often in a variety of forms. The integrated services, where distributor and publisher are one, have all the headaches.

Rule Two is a set of instructions: keep the price simple, flexible, understandable, budgetable, and when in doubt, overprice.

There are so many variables, unknowns, and changes in the electronic information industry that its players generally overlook something or underestimate expenses. Lowering price is always easier than raising price even when the market begs for value-added at an added price. Also, since each vendor strives for unique niche markets, however large, no offering is exactly like any other; copying another vendor's or publisher's prices and pricing strategy doesn't serve. Publishers should study the value-added in software and format that each vendor or publisher offers to determine the different value of its information base and charge royalties accordingly because its formation is worth more, or less, depending upon the service.

To illustrate these variables, consider the disparity in expenses from one vendor to another, even among a range distributors with similar data and software services. Compare a small financial integrated service with a large financial services vendor. Both provide price-quotation services among a number of wares but the large company has a worldwide communications system that eats up 32% of its expenses while the small company buys its communications amounting to only 8% of its expenses. Neither company has any third-party databases for which it must pay royalties, but the small company gathers and produces information for which it pays 35.5% of its expenses. The big company
gathers all its data through communications and organizes it through computing and software costs, the latter costing 22% in expenses compared with only 15% in the smaller firm.

Add to these two a small bibliographic and text vendor, a huge credit information-based vendor, and a gateway service. Sales and marketing expenses alone, range from zero expense to 35% of all expenses with ranges in between of 9, 10.5, and 23 percent. Computing runs as high as 31% of expense at the credit vendor while database royalties spread from 10 to 40 percent of all expenses at two of the distributors. Total expenses at the small bibliographic/text company and the gateway service company leave only a 3 percent for profit while the two financial services make 42% profit at the small financial service and 53% at the large vendor. The credit company has a profit margin ranging from 18 down to 12 percent depending upon its overall corporate accounting where print is still a heavy proportion of revenue.

*Rule Three: there is no industry norm not even within market and information sectors; pricing upon individual company performance.* What happens to a single vendor in one year may not repeat itself the next. The performance of one product or product line over another may differ widely from the performance of the total company.

*Rule Four: figure the total costs & expenses to revenue as well as the costs / expenses of each product offering as well as the subtotals of lines of information products in order to establish the profitability and thus the price of each to the whole.* That requires a lot of accounting but is the only way to assess profit and loss within market niches.

For the publisher, electronic products bear almost no resemblance to print products. Revenues from the direct expenses and anticipated profit of printed products can be some 80% of total product revenue (the rest is largely general and administrative expense) while electronic royalties and/or return range from 20% to 60% of what a distributor takes in against that database. One publisher even makes a 70% royalty from its most popular databases.

Distribution companies that grew out of the now-shrinking timesharing industry are still surprised when old timesharing formulas for pricing don’t work. Little wonder. Timesharing relies on little data with low storage and high manipulation where up-front subscriptions and charging by a complex algorithm of computer resource units (input, output, manipulation, and number crunching) reigned. Electronic data requires vast amounts of storage and generally low manipulation although sophisticated searching software and an increasing array of analytical or expert systems applications are a necessary expense as well as attendant services from document delivery to E-mail.

But the major problems and oversights lie in other places, chiefly in marketing where more dollars are needed to stay competitive; training to be certain that users understand what content is in the pot, how to retrieve the right data for the
lowest cost, and to encourage more usage from present customers; facilities and information maintenance for which hardware costs go down but software, including expert systems and natural language go up; migration from print to multimedia electronics products; and movement from the column/chapter/book concept to windows/data-elements-of-information concept demanding better knowledge of the value of data and information.

Rule Five: wherever possible, price to the value of the data/information.

Simultaneously, the electronic information industry is changing rapidly. Once-expensive hardware costs are coming down making computers and peripherals easily affordable. Communications have moved from high, long distance rates with low-cost, local loops to the reverse encouraging companies to qualify for long-distance rates when installing terminals and communications equipment. Transmission speeds at ever-higher baud rates for instant delivery of highly-volatile data in global marketplaces have changed the way the world works internationally. Users are sophisticated and demanding. Today, only 7.8% of the customers are librarians and information specialists. Nearly 25 percent of all users are credit managers. Over 8 percent are marketing and media specialists. Over 90% are in decision-making departments. Who said the information industry isn’t selling data to end users?

Personal computers field digital data controlled by the customer, not the vendor(s). Thus trading room vendors are abandoning video screens and dedicated terminals to install controllers that mix data from client proprietary information with quote and public data with analytical software.

One-way and two-way gateways, already over 200 in number, add new markets but torture the already complicated pricing routines. Markets differ in the amount of money available for electronic services. Products are priced in vastly different ways and products are sold in different ways to different markets: some to whole companies, usually for a licensed multi-year free and sometimes with added pricing based on usage; other products are priced by the number of terminals that are used to access data; other products are sold directly to individuals, by name with identification number for access. Additionally, many vendors clone portions of their facilities to take advantage of local or regional data services as well as a mix of offline and long-distance to headquartered computing facilities to tailor their wares for specific markets. This often requires a completely new pricing strategy for each market.

Rule Six: consider distinct, different prices and pricing strategies for each new market being addressed. Publishers and/or vendors should also consider different formats and software for the same data going to different markets.

Four basic pricing factors are responsible for driving the price higher or lower: uniqueness of the database, market acceptance, competitive pressure, and the desire for profit versus market share. Textbook pricing parameters help develop a
basic strategy: cost plus profit, demand driven by perceived value, and market share driven including position in the marketplace.

Rule Seven: know your user and the buyer of electronic information services. (By user is meant either the person with hands on keyboard and/or the person who actually uses the output of electronic services.)

Nearly 60% of the time, in business at least, the actual buyer – the person who makes the decision – is different from the person who uses the database service, and the person who actually signs the contract may be different from either. Often they are not in the same department; for example, financial officers buy a lot of information or senior executives in very large divisions or heads of corporations or even boards of directors as is the case for the purchase of many stock quote and money market services, although nearly 70% of the time in business the users have a recommending position. Often a lawyer and sometimes a librarian signs the contract.

The most important, oft-overlooked ingredient to sound pricing strategy is the inclusion of management objectives. Does management want to maximize profit, gain or maintain share, reach sales quota, reach a return on investment, price as low as possible, add value and service to an existing electronic file, or achieve some other goal? And in what time frame? Failing to receive a position from top management can be fatal to a product or service’s ability to succeed. The price will surely be wrong for the company and thus for the product. This also ensures that management is told or knows something about the marketplace.

Rule Eight: get top management to determine its objective.

Rule Nine: whenever possible charge for information. Tie questions and need to answers.

Internal price considerations must be deliberated carefully because producers and vendors have control over these factors, including the desired return on investment, the costs and achievements of hardware and software, personnel costs (inhouse, out-of-house, off-shore or onshore, and so forth), management objectives, and a fair return for value received.

External price considerations must be known even though information providers and distributors may have little or no control over these factors, chief of which are the competition, the perceived needs and/or the perceived value of the information with service, the size of the market, and the demand to the supply of information often delivered in multiple media from multiple sources including print.

An array of pricing options faces the publisher and the vendor. Remembering to keep it simple, players can choose from the following: installation fees, connect time, monthly minimum, up-front subscription, computer resource units, offline pricing, discounts, telecommunications, royalty, start-up fees, training fees, num-
ber of hits or printouts, multi-tiered pricing often including multiple-media buyers of print and online, flat rate, site licensing, per search, port or terminal based, and bundling often of communications.

Once a price has been established, follow usage patterns and number of users to payment for services in order to figure the average paid price for each database and each kind of service. For example, LINK Resources Corporation, a New York-based market research and consulting firm, has surveyed vendors in North America to establish the number of users and the amount of revenue gleaned in each of the 18 information types by which it carves the North American electronic information marketplace. The highest number of users bought subscriptions to news – 461,554 individuals, corporations, or subscriptions based on the number of terminals through which data is accessed. But the average amount paid per subscriber in 1986, the year of the survey, was only $490 per year, the next to the lowest price paid. Only product information, whose subscriptions averaged only $267 per annum from 246,805 subscriptions, was lower. Highest was product information, whose 4,772 subscribers, mainly subscribing corporations, paid a whopping $54,590 average in 1986 for electronic information. Knowing statistics like these and the institution's specific product and user performance is crucial to sound pricing and efficient marketing.

Rule Ten: the price will change, once a price has been established and used in the marketplace.

The push, pull, and volatility of the information services marketplace sends most folks back to the drawing board and users to pay another price, another way.