

ITR5 Information Usage

Lecture 9

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Reading

Shapiro and Varian, chapter

the Encyclopedia Britannica

32 printed volumes (44M words). Sold for \$1600 in the mid-90s.

1992: MS buys Funk & Wagnalls (14M words), puts it on CD, sells for \$45 as "Encarta".

1994: Britannica offers online for \$2000 to counter market share fall.

1995: Encarta's market share reaches 44%. Britannica offers \$120 home online subscription

1996: Britannica offers CD for \$200. Severe restructuring in the company. Encarta's share falls to 27%.

1997: Britannica offers \$87 home online subscription, but few subscribers

1998: CD version for \$90.

(I leave out discussion of meta terms to simplify.)

price of information

Information is costly to produce but cheap to reproduce. Important economies of scale.

First-copy costs dominate costs. These are sunk costs.

Fixed costs are large, variable cost negligible.

No natural capacity limits.

CD phone book

1986 Nynex brings out directory for NY area.

Phone companies fear for yellow page revenue (\$10 billion), don't want to rent digital listings.

Pro CD gets all phone books typed in a Chinese sweat shop \$3.5 per worker per day. 70 Million entries.

Data sells for hundreds of dollars on CD.

But a few years later other companies enter, price drops.

In general, competition pushes prices to marginal cost, close to 0 here.

Sustainable market structure

Dominant firm model: One firm has market domination

Differentiated product: A number of firm offer different varieties of the product.

For a firm to survive, it has to

- differentiate product
- achieve cost leadership

Product differentiation

for the encyclopedia, there are three markets

- multi-media
- educational
- library and reference

Personalization has great potential, both as far as prices and as far as contents is concerned.

Cost leadership

The strategy is to reduce average cost by increasing volume through reuse and resale

example: Baywatch

- cheap to produce
- universal appeal
- highly reusable

to survive

- don't be greedy
- play tough

“CP/M, WordStar, VisiCalc”