

# Digital Disruption of Encyclopaedic Proportions\*

In 1768, three Scottish printers began publishing an integrated compendium of knowledge — the earliest and most famous encyclopedia in the English-speaking world. They called it *Encyclopedia Britannica*. Since then, *Britannica* has evolved through fifteen editions, and to this day it is generally regarded as the world's most comprehensive and authoritative encyclopedia.

In 1920, Sears, Roebuck and Company, an American mail-order retailer, acquired *Britannica* and moved its headquarters from Edinburgh to Chicago. Ownership passed to William Benton in 1941, who then willed the company in the early 1970s to the Benton Foundation, a charitable organization whose income supports communications programs at the University of Chicago. *Britannica* grew under its American owners into a serious commercial enterprise while sustaining its reputation as the world's most prestigious and comprehensive encyclopedia. The content was revised every four or five years. Brand extensions, such as atlases and yearbooks, were added. The company built one of the most aggressive and successful direct sales forces in the world. By targeting middle-income families and focusing on their aspirations for their children, the company developed a marketing proposition as compelling as the intellectual content of the product itself.

By 1990, sales of *Britannica*'s multivolume sets had reached an all-time peak of about \$650 million. Dominant market share, steady if unspectacular growth, generous margins, and a two-hundred-year history all testified to an extraordinarily compelling and stable brand. Between 1990 and 2000, however, sales of *Britannica*, and of all printed encyclopedias in the United States, collapsed by over 80 percent as CD-ROM encyclopedias took hold.

Whereas *Britannica* sold for \$1,500 to \$2,200 per set (depending on the quality of the binding), CD-ROM encyclopedias, such as Encarta, Grolier, and Compton, list for \$50 to \$70.

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\* Adapted from Evans, P., & Wurster, T. S. (2000). Blown to bits: How the new economics of information transforms strategy. *Boston, Mass.: Harvard Business School Press.*

But hardly anybody paid even that: the vast majority of copies were given away with the sale of computers and peripherals. With a marginal manufacturing cost of \$1.50 per copy, the free CD-ROM made good economic sense. The marginal cost of *Britannica*, in contrast, was about \$250 for production plus about \$500 to \$600 for the salesperson's commission.

At first, Britannica's executives seemed to view the CD-ROM encyclopedia as an irrelevance: a child's toy, one step above video games. This perception was entirely reasonable. Microsoft had licensed the text for its encyclopedia from Funk & Wagnalls, whose third-rate, nearly defunct product, surviving as a periodic promotional item in the aisles of supermarkets, was perceived to be a brand so pathetic that Microsoft dropped its name in favor of the ad agency coinage *Encarta*. The addition of public-domain illustrations and scratchy sound recordings too old to bear a copyright (and therefore available at no cost) hardly made for a serious rival to the *Britannica*.

As revenues plunged, it became obvious that whether they *ought* to be or not, CD-ROM encyclopedias were serious competition. Britannica executives reluctantly considered creating their own CD-ROM product, only to encounter a technology constraint: the content of *Britannica* was too big for the medium. *Encarta*, with its seven million words, could fit easily onto a CD-ROM, with plenty of room for illustrations and interactivity. *Britannica*, however, had more than forty million words. It was impossible to create an interactive version within the capacity limits of a CD-ROM. The technology was not ready for the content, so the company's executives decided to wait.

Months passed. Sales continued to plummet. In response, the company put together a text-only CD-ROM version of *Britannica*. But even if priced at a significant premium over *Encarta*, a CD-ROM version of *Britannica* could not possibly generate the \$500 to \$600 sales commission of the printed product. Britannica executives decided to bundle the CD-ROM as a free bonus for buyers of the multivolume set. Anyone who wanted to buy the CD-ROM alone would have to pay \$1,000.

In May of 1995, the Benton Foundation finally put the company up for sale. For nearly eighteen months, investment bankers tried to find a buyer. Microsoft said no. Technology, media, and information companies all declined. Finally, in 1996, financier Jacob Safra agreed to buy the company, paying less than half of book value.