Economics focus

Profiting from obscurity

What the "long tail" means for the economics of e-commerce

May 5th 2005

DISRUPTIVE technologies, learning curves, tipping points—every so often a trendy new term enters the business lexicon and becomes a staple of business plans, conference speeches and PowerPoint presentations. The latest example, generating buzz among entrepreneurs, technologists and bloggers, is the idea of the "long tail". The term is not new, having long been used in statistics to refer to a feature of "power-law" distributions, such as the frequency with which different words are used in English: there are a few common words that are used a great deal, and a long tail of increasingly obscure words that are used less often. But the idea is now in vogue because of its particular relevance to the economics of e-commerce. Its popularity in this context is due to an article* published last year by Chris Anderson, formerly a correspondent for The Economist, who is the editor-in-chief of Wired, a technology magazine. The article struck a chord: Mr Anderson is expanding it into a book, and talk of long tails is becoming a venture-capital cliché. "Business plans now have to have an obligatory long-tail passage," he says. So when people invoke the long tail, what do they mean?

The short answer is a shift from mass markets to niche markets, as electronic commerce aggregates and makes profitable what were previously unprofitable transactions. Consider book sales, which obey a power-law distribution: there is a small number of very popular books, which sell millions of copies, and then a long tail of less popular books. A real-world shop can only stock so many titles on its shelves, so it generally holds those most likely to sell, at the head of the curve: even the largest bookstore carries only around 130,000 titles. But an online store, with no limits on its shelf space, can offer a far wider range and open up new markets further down the long tail. In the case of Amazon, for example, around a third of its sales come from outside its top 130,000 titles. Similarly, Rhapsody, a streaming-music service, streams more tracks outside than inside its top 10,000 tunes. Mr Anderson's point is that the collective demand for obscure items is very large, is growing, and can be aggregated over the internet, so that selling obscure books, music CDs or movies could prove to be just as lucrative as selling hits.

This has a number of intriguing implications. For one thing, opening up those previously uneconomic niche markets should increase overall demand: as people are better able to explore niches, they are more likely to find things they like, and may well consume more of them. This will then shift some demand, at least, away from hits. Indeed, the long tail reveals the hit-driven nature of the entertainment industry to be, in part, a vestige of scarcity. With limited space on store shelves, media providers are traditionally very discriminating about what they release, and use intensive marketing to generate a handful of hits. The shift towards electronic sales and distribution, however—music can already be purchased and downloaded instantly, and movies will be next—means that content providers can afford to be less discriminating. "The long tail says rather than trying to guess what the market wants, put it all out there and you'll find demand you hadn't anticipated," says Mr Anderson.

But how can people find content they want when it is buried far down the tail? Already, a number of mechanisms have emerged, based around user recommendations. Perhaps the best known is "collaborative filtering", in which purchase histories are analysed to work out what else is likely to interest the buyer of a particular product ("Customers who bought this item also bought...", as Amazon puts it). This approach allows users to navigate from hits that they know they like to more obscure titles further down the tail. "You need not just variety, but information about variety," says Mr Anderson. "A long tail without good filters is just noise." Many people find even the amount of choice on supermarket shelves overwhelming—in large part because there is so
little information on which to base a rational choice. But a mere 27 flavours of jam is nothing compared with millions of music tracks or thousands of movies, so providing filters to help people find what they want is vital.

**From mass market to niche nation**

Perhaps the most profound implication of the long tail, however, is its impact on popular culture. As choice expands and people can more easily find niche content that particularly interests them, hits will be less important: so what will people talk about when gathered around the water cooler? In fact, says Mr Anderson, the idea of a shared popular culture is a relatively recent phenomenon: before radio and television, he notes, countries did not operate in "cultural lockstep". And the notion of shared culture is already in decline, thanks to the rise of cable television and other forms of market fragmentation. The long tail will merely accelerate the effect. There will still be blockbuster movies, albums and books, but there will be fewer of them. The companies that will prosper, says Mr Anderson, will be "those that switch out of lowest-common-denominator mode and figure out how to address niches."

Many successful online businesses, such as Amazon, Rhapsody or the iTunes Music Store, already exploit the effects of the long tail. So too do other internet companies, such as Google (which makes money not just by selling adverts to big firms, but also by placing obscure adverts alongside obscure web pages) and eBay (which aggregates low levels of demand for obscure products to make a huge business). Hence the venture capitalists' enthusiasm for long-tailish business plans—and, now that the term is deemed to be cool, its use and misuse in other spheres. The misuse, says Mr Anderson, is painful. But it is arguably a sign of success: the "long tail" has passed into common parlance.

* "The Long Tail": [www.wired.com/wired/archive/12.10/tail.html](http://www.wired.com/wired/archive/12.10/tail.html)