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**Michael Schrage**

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# The Myth of Commoditization

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Executives, entrepreneurs and investors are too ready to believe that commodity is destiny. The result is a dulling of strategic focus and a narrowing of the business mind.

MICHAEL SCHRAGE

Unlike software, silicon or recombinant DNA, toast makes an unlikely symbol of sustainable innovation. Heated bread lacks the high-tech cachet of multicore microprocessors or polymerase chain reactions. But the technological history of toast, in fact, persuasively undermines one of the truisms that profoundly distort innovation investment worldwide.

That flawed conventional wisdom is crisply described in a recent *Financial Times* column bearish on technology:

“Bruce Greenwald, the Columbia Business School professor whose course on value investing is recommended even by Warren Buffett, nails this phenomenon memorably. ‘In the long run,’ he says, ‘everything is a toaster.’ In other words, all great innovations eventually become commodities, bought on the basis of price and nothing else. . . . Sooner or later, Microsoft software programs, Intel microprocessors, Dell computers and Cisco routers will all be toasters.”

Clever, glib and memorable — but is it true? History says no. While toasters will never be icons of postindustrial innovation, even a cursory review of their ongoing reinvention reveals that they’re not commodities by any meaningful definition of the word. Moreover, they still make good money, as well as better toast. The toaster’s technical evolution is a case study in profitable innovation, not just price competition. Commodity isn’t destiny.

England’s Crompton & Company offered an electric toaster as early as 1893. The technical breakthrough that made modern toasters possible, however, was the 1905 invention of Nichrome — the nickel-chromium alloy that became the

dominant medium for controlled infrared heating. In 1909, General Electric Co.’s D-12 became America’s first commercially successful toaster. It retailed for \$3 and could toast only one side of the bread at a time; because wall outlets were uncommon, the power cord was designed to be screwed into a light socket.

A decade later, Charles Strite revolutionized toasting technology with his 1919 invention of the pop-up toaster. He initially sold it to restaurants. By 1926, the Toastmaster — a consumer version — hit the shelves with advertisements proclaiming, “Perfect toast every time! Without turning! Without burning!”

Toaster sales in the United States alone grew from 400,000 units in 1922 to 1.2 million by 1930. Their rise prompted bakeries to innovate to the technology by selling presliced loaves of bread. Wonder Bread, for example, was originally Wonder-Cut Bread.

Fully automatic toasters appeared in the 1940s. General Electric transformed both the appliance and kitchen countertops in 1956 with its introduction of the toaster oven. Toaster innovation even begat edible innovations customized to the technology: Kellogg’s Pop-Tarts, for example, were successfully launched in 1964.

Conversely, newer breakfast foods, like bagels, created a need for toasters with wider slots, introduced in the 1980s. New heat-resistant plastics led to new toaster shapes, colors and housings. The 1990s introduced low-cost silicon chips to regulate toaster temperatures and intelligence better.

Of course, these few paragraphs can’t do justice to the wealth and variety of innovative technologies, materials and lifestyle changes that radically transformed the toaster over the past century. The simple reality is that virtually no serious observer or participant in the multibillion-dollar global kitchen-appliance market would describe toasters as commodities.

A *Gourmet Retailer Magazine* analysis from July 2005 provides the industry perspective: “The downsizing of households will present manufacturers with opportunities to develop products for smaller households that range from college dormitories to empty nests. Many believe that trend will help drive sales of the redesigned toaster oven. ‘That’s going to be a category to watch,’ says Peter Greene, vice president/general manager of NPD Houseworld. ‘More real commercial-style brands are entering the category. They’re positioning them as a countertop oven.’

“New introductions will continue to enter the marketplace at all price points. The continued polarization of the marketplace — a thinning of the mid-price product range — will help both mass merchants and specialty retailers. While 50% of small electrics are sold in the mass channel, higher-end introductions and the ability to provide one-on-one customer service will boost sales in the specialty channel.”

To suggest that “in the long run, everything is a toaster” is an appropriate metaphor for technological commoditization isn’t just simplistic; it’s simply wrong. The global marketplace in countertop toasting technology is demonstrably driven by differentiation, segmentation and ongoing technical innovation. Companies that don’t differentiate, segment and innovate fail.

Does price matter? Of course; it always does. But even after more than a century’s worth of competition and China’s recent emergence as a global toaster manufacturer, price isn’t even *primus inter pares* in determining market success. Toasters are no more a commodity product than cars, computers or clothing — unless the word “commodity” has, ironically, been rhetorically commoditized into meaninglessness.

### **Economics Versus History**

This brief tale of the “commodity” toaster recalls Ronald Coase’s 1974 dagger-edged debunking of Nobel laureate Paul Samuelson’s not-quite-accurate textbook example of lighthouses as a “public good.” Since 1964, Samuelson’s bestselling *Economics* had used the lighthouse as the symbol and substance of an essential good that the private sector — as opposed to public funding — was poorly positioned to provide. “Its beam helps everyone in sight,” Samuelson wrote. “A businessman could not build it for

a profit since he cannot claim a price for each user.”

A skeptical Coase — who would win his economics Nobel in 1991 — looked at the historical record instead of the theoretical analysis. What he described in his now classic *Journal of Law and Economics* article was literally four centuries’ worth of successful examples of privately built and privately run English lighthouses. They made their profits by charging ships docking at nearby ports a fee. The Trinity House was his prime example; it was a private operation granted a 1514 charter to operate lighthouses and charge ships a toll for their use.

Where Samuelson stated that lighthouses had to be financed out of general revenues, Coase observed that, in fact, such financing had not been tried in England: “The [Trinity House] service continued to be financed by tolls levied on ships.” The historical record completely defied Samuelson’s metaphorical analysis.

Mark Skousen, an economist who extensively chronicled this Nobel duel of lighthouse finance, has tartly observed that while Coase’s critique appeared in 1974, Samuelson’s textbook didn’t acknowledge its existence — let alone its validity — until the 1994 edition. That was done with a footnote.

The essential point for industry and innovators worldwide is that received economic wisdom can be dangerously at odds with knowable historical fact. That conflict can lead to horrendous strategic decisions and grossly inefficient resource allocation by entrepreneurs and investors alike.

That is particularly true when reviewing the history, mythology and economic ideology of commodity. An excellent case can be made that, upon review, many goods and services that have been declared commodities are anything but. Business history — as opposed to economic theory — indicates that products contemporaneously defined as commodities often prove to be exceptionally inviting platforms for innovation.

For example, the notion of water as a commodity goes back as far as Adam Smith’s “water and diamonds” paradox in *The Wealth of Nations*. Yet even though the overwhelming majority of the industrialized world enjoys relatively cheap and pure drinking water, a multibillion-dollar bottled water business garners double-digit profit margins. That Evian and Dasani branded water are less commodity products than AMD and Intel microprocessors is surely arguable. Yet there aren’t many Warren

Buffett-like fundamental value investors asserting, “In the long run, bottled water is a toaster.”

Similarly, Starbucks Corp.’s global success as both a retail brand and a “fair trade” merchandiser has become a business school case study in turning a perceived commodity — coffee — into a profitable premium product. The ability of Starbucks and its imitators to successfully differentiate, segment and innovate around coffee beans seemingly contradicts the economic assertion that coffee — whether tall, venti or grande — is a readily substitutable commodity.

Informal interviews with senior executives at Scott Paper Co. and the Procter & Gamble Co. reveal that neither company manages toilet paper as a commodity product. Both firms point to scanner data showing that so-called “generic” and “store-brand” toilet papers have not, despite significantly lower prices, made significant inroads into their market share. Supported by relatively large research and development budgets, these capital-intensive products are constantly being improved and re-packaged. “It’s a very good business for us,” says a top Scott Paper executive. “We don’t invest [in it] like it’s a commodity.”

These are obvious examples; others come from petroleum to textiles to commercial banking. The compelling reality is that ongoing shifts — subtle and profound — in business and technological climates invariably recombine to alter enterprise calculations of what constitutes a commodity. After all, coal tar was originally a waste product of the mines before becoming the essential ingredient of the global high-tech industry in synthetic dyes. Today’s commodity may be tomorrow’s sustainable competitive advantage. Innovation’s future is inherently unknowable.

### **When Is a Commodity a Commodity?**

That’s not to say that commodity products and services are rarer than unicorns. It’s just that, like commodity toaster ovens or Samuelson’s public lighthouse, they may prove to be more fiction than fact. Precisely when does an entrepreneur or an enterprise confidently know what they’re selling has become a commodity? When they themselves are no longer creative or clever enough to make their offering more appealing? Or when they’re confident that no new competitors will appear? Business history suggests that commodity is far more often a

temporary state than a permanent condition.

The danger is that executives, entrepreneurs and investors may buy into the commodity designation far more often than they should and therefore behave as if commodity is destiny. Just as defining labor as a cost alternately invites and excuses a different level of investment than seeing it as a resource, the fatal lure of the commodity ideology is that it becomes a self-fulfilling prophecy. Businesses that believe that today’s breakthrough is tomorrow’s toaster understandably fear rapidly diminishing returns from their innovation investments. The economics of “good enough” innovation become good enough. The potential of ideas is inherently undervalued. Sustainable innovation opportunities are either missed or dismissed.

This is precisely what happened to Yahoo! Inc. as it came out on the other side of the Internet bubble in 2001. The company had originally, expensively and successfully branded itself as the primary portal for Internet search, making fast, easy and comprehensive search an intrinsic part of its customer offering.

Yet even as young Google Inc. attracted media attention and an increasing share of Internet traffic, Yahoo senior management both publicly and privately insisted that search was just one narrow slice of functionality for a portal. Indeed, the proliferation of innovative algorithms was destined to turn search into a commodity service with friction-free switching costs, said one C-level Yahoo executive when Google went public in 2004.

Yahoo management asserted that “media” was both a bigger and faster growing business than Internet search, and the company invested its resources accordingly. While it’s too early to say that search is unlikely to become a commodity anytime soon, it’s not unfair to observe that 2004 was far too early to perceive such a nascent technology as a global commodity. By effectively declaring search a toaster, Yahoo didn’t sharpen its strategic focus; it narrowed its business mind.

Google’s subsequent success was hardly a function of Yahoo’s poor perception. However, Yahoo’s preemptive deference to a gross multibillion-dollar technical and business misjudgment of search underscores the perils of commodity thinking. To refuse to compete because you might lose or because it’s too expensive is one thing; to refuse to

compete because you think you'll be in a commodity business is quite another.

Consider The Hoover Company, once the dominant U.S. brand in vacuum cleaners. Although the Ohio company had been a market leader since 1908, its innovation investments in the core product reflected an apparent belief that vacuum cleaners were toasters. Hoover remained far more concerned about price competition than innovation differentiation even as technical advances materialized overseas.

When Britain's James Dyson imported his Dual Cyclone vacuum cleaner to the United States in 2002, it had long enjoyed widespread success in the United Kingdom and Japan. After just two years in the United States, Dyson's Dual Cyclone cleaners had captured nearly 21% of the U.S. market in dollars, ahead of Hoover's 15.6%. Dyson's swift success in the multibillion-dollar market startled because it came even as Hoover cut prices.

"We're thrilled with how quickly we have become the biggest in America," Dyson told a British newspaper at the time. "Our average selling price there is \$500, when you can buy a vacuum cleaner for as little as \$75 there." In the middle of a price war, the market's most expensive machine enjoyed the greatest success in a century-old industry dominated by an established brand leader.

Should Hoover or a Chinese rival eventually overtake Dyson in the United States, history would strongly suggest that such future success won't result from managerial behaviors that treat vacuum cleaners as commodity products.

### The Message in Low Prices

For a Cisco or Sony or Apple or Dell or Infosys or General Electric to believe commodity is destiny would be a betrayal of their origins, histories, investors and — most of all — customers. Innovation-oriented companies aren't afraid of being low-cost providers in their markets; in fact, they frequently invest in process and product innovations that make them better price competitors. However, they also understand that price is a market signal that sends an important message to both buyers and sellers.

What is that message? For many economists and enterprises, increasing competition and declining prices signal that pricing power decreases as the ability to substitute grows. But there is an-

other interpretation consistent with business history worldwide. Intense price competition may not signal the prolific presence of substitutable commodities but an arid absence of unique innovation. The market signal is that price is the most important differentiator *of the moment*. That signal presents a clear and present incentive for innovators and entrepreneurs to innovate in order to differentiate; to identify hidden or untapped potential for new value creation.

This is particularly important because, as a rule, intense competition and declining prices draw into the market new customers, who find once expensive items newly affordable. These new customers frequently have novel or unconventional uses for these goods and services that, in turn, demand innovative responses of their own. The crucible of competition itself has transmuted the value proposition and potential of the alleged commodity. Once computer chips become cheap, for example, why not put them into toasters? If household appliances become "smarter," why not network them? A new innovation ecology emerges. That is the antithesis of commodity.

That's not to say competition doesn't render once innovative technologies anachronistic or obsolete. Innovations effectively given away — Google, Yahoo and vast arrays of digital services — may never be differentiable based on price. But the more closely one looks at so-called commodities, the more the term appears to be a convenient rhetorical device, not an accurate economic description.

Indeed, the history of context is just as important as the context of history. Greenwald's toaster quote pays homage to John Maynard Keynes' famous aphorism "In the long run we are all dead." However, as is often the case, the full quote in historical context proves far more revealing and on point than its appropriator may have intended: "The long run is a misleading guide to current affairs," Keynes originally wrote in 1923. "In the long run we are all dead."

Commodity is a misleading guide to current innovation. In the long run, everything is not a toaster. Not even toasters.

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