1

WHY IS MOVIE THEATER POPCORN SO EXPENSIVE?

... [M]en are fond of paradoxes, and of appearing to understand what surpasses the comprehension of ordinary people...

—Adam Smith [1723–1790]

Why don't we observe movie popcorn price wars, similar to what other industries engage in from time to time? When asked this question, the overwhelming majority of businesspeople will answer, because there is no competition—the movie theater has a captive audience. Other common explanations include:

- Limited selling time
- High fixed cost of operating concession stand
- It is how the theater owner makes a profit
- Higher clean-up costs imposed by snack eaters
- Tastes and smells better than you can make at home
- Part of the experience of seeing a movie
- Because people will pay for it

At first glance, all of these answers appear reasonable, except to an economist. The most popular response—captive audience—leads to the question of why there are no pay toilets in the theater? You are certainly a captive audience in that regard, but perhaps theater owners understand that if they installed pay toilets they would lose at the box office what they made from the bathrooms. The high fixed costs, in terms of scarce square footage, equipment, fixtures, clean-up costs, and required employees, is certainly a plausible reason, but does not really account for the large premium price of popcorn. To say it is where the theater owners make their profits is definitely true, but begs the question of why they do not make the profits from ticket sales and sell more popcorn at closer to cost? Eating popcorn is certainly part of the experience of going to the movies, and people will pay for it, yet this explanation is still incomplete.

Assuming theater owners want to maximize their profits, what do the theater owners know the rest of us, perhaps, do not? The consummate economist Steven Landsburg provides the answer:

I believe he knows this: *some moviegoers like popcorn more than others*. Cheap popcorn attracts popcorn lovers and makes them willing to pay a high price at the door. But to take advantage of that willingness, the owner must raise ticket prices so high that he drives away those who come only to see the movie. If there are enough nonsnackers, the strategy of cheap popcorn can backfire.

The purpose of expensive popcorn is not to extract a lot of money from customers. *That* purpose would be better served by cheap popcorn and expensive movie tickets. Instead, the purpose of expensive popcorn is to extract *different* sums from *different* customers. Popcorn lovers, who have more fun at the movies, pay more for their additional pleasure (Landsburg, 1993: 159).

This answer is more precise, since the important point is that "some moviegoers like popcorn more than others," and the theater owner cannot separate these customers when they are outside queuing up for the movie. A method was needed to separate the snack eaters from those who just want to watch the movie, which the concession stand provides since it allows customers to divide and self-identify themselves. This may seem a subtle point, but it is highly profitable, since segmenting different types of customers allows the theater owners to charge them varying prices depending on the value received.

Students, children, and people with large families are usually more price sensitive, and not likely candidates to spend money on snacks. The theater owner does not want to turn these customers away, and hence keeps the box office price lower by charging higher prices to snack eaters. What you are really buying when you purchase a movie ticket is an opportunity set—a chance to enjoy the movie, or to enjoy it with popcorn. Economists call this a *two-part tariff*, defined as a pricing strategy in which the customer must

pay a fee in exchange for the right to purchase the product. Examples abound of this strategy: country clubs charging membership fees and monthly dues; Gillette charging for the razor then the blades; amusement parks charging an entrance price followed by a price for each ride.

Some people recoil at the thought of *price discrimination*—charging different prices to different customers—claiming the practice is blatantly unfair and should be illegal. But what would happen if the practice were outlawed? Theater owners, airlines, restaurants, and myriad other businesses would have to increase prices for the very customers who are least able to afford a higher price—children, students, large families, senior citizens, and so on. By engaging in price discrimination, businesses are actually increasing social welfare and making more products and services available to the poorest members of society. This is not to imply that price discrimination is based on race, gender, religion, or ethnicity, but rather is based on ability and willingness to pay. As this book will prove throughout, this practice is ubiquitous in any economy, and most price theorists agree it has a salutary effect on societal welfare.

If you found this answer for why movie theater popcorn is so expensive thought provoking, welcome to price theory. The German poet Goethe thought double-entry bookkeeping "among the loveliest inventions of the human mind." One should say the same about price theory, as it truly is "one of the great products of the human mind," as economist Donald (now Deirdre) McCloskey explains in his textbook, *The Applied Theory of Price*:

The theory of price is one among the larger intellectual achievements of the nineteenth century, such as the theory of heat engines, the decipherment of hieroglyphics, the professionalization of history, the invention of abstract algebras, and the theory of evolution. Price theory explains much human behavior (McCloskey, 1985: 1, 4).

Since price theory offers tremendous insight into human behavior, it is worth the time and effort to study it in greater depth. It is sometimes said that economics is nothing but refined common sense, which is certainly true. Yet many myths about this crown jewel of the social sciences persist, even among businesspeople.

This is one of the most glaring weaknesses in most business books and management ideas: They are all practice with no theory. Most do little else than propound platitudes and compose common sense into endless checklists and seven-step programs. Yet, all learning begins with theory. There is nothing as sterile as a fact not illuminated by a theory; we may as well read the telephone book. This may explain why four out of five business books are never read to completion.

The schism between management theory and economics is profound, and one of the reasons is that the study of management theory is relatively young compared to its older sibling economics, which dates back hundreds of years. In their piercing book *The Witch Doctors: What Management Gurus Are Saying and Why It Matters*, John Micklethwait and Adrian Wooldridge, two staff editors for *The Economist*, level this charge against the immature discipline of management theory:

Management theory, according to the case against it, has four defects: it is constitutionally incapable of self-criticism; its terminology usually confuses rather than educates; it rarely rises above basic common sense; and it is faddish and bedeviled by contradictions that would not be allowed in more rigorous disciplines. The implication of all four charges is that management gurus are con artists, the witch doctors of our age, playing on business people's anxieties in order to sell snake oil. The gurus, many of whom have sprung suspiciously from the "great university of life" rather than any orthodox academic discipline, exist largely because people let them get away with it. Modern management theory is no more reliable than tribal medicine. Witch doctors, after all, often got it right—by luck, by instinct, or by trial and error (Micklethwait and Wooldridge, 1996: 12).

I have tried to avoid these four defects by having the theories presented herein drive the ideas, not the other way around.

Therefore, the book you are about to read is more theoretical than you may be used to if you are a regular reader of business books, or attend business seminars. I make no apologies for this, for as the great mathematician David Hilbert wrote, "There is nothing more useful than a good mathematical theory," and the same is true with respect to economics and the study of human behavior. Price theory will be utilized throughout as the overarching model to gain better insight into value and price.

All theories are subject to falsification, precisely how all science progresses. This is an interesting phenomenon, because it implies that most new theories—and especially management fads of the month—have to be wrong or irrelevant, or else knowledge would proceed at lightning speed and advance by Newtonian or Einsteinian leaps every day. It does not. This makes it difficult for editors and publishers to admit most of what they publish is trivial, or just plain incorrect. In reality, knowledge progresses slowly, in a never-ending iterative process best characterized as *knowledge creep*.

MY COVENANT WITH YOU

In an attempt to contribute to your own knowledge creep, my goal is to have you think *with* me, not *like* me. You should be skeptical about the ideas presented and subject them to your own rigorous analysis and experience. Do not accept anything at face value, even from a so-called expert, for as Harry Truman said, "An expert is someone who doesn't want to learn anything new, because then he wouldn't be an expert." I have been studying price theory for nearly two decades and I still consider myself a student and my knowledge incomplete with regard to this fascinating body of knowledge.

In that spirit, I have tried to follow the wisdom of an inspiring little book by John Milton Gregory, *The Seven Laws of Teaching*, first published in 1884, which sets forth the seven pillars necessary in order to educate effectively, and this shall act as my covenant with the reader:

- **1.** A *teacher* must be one who *knows* the lesson or truth or art to be taught.
- 2. A *learner* is one who *attends* with interest to the lesson.
- **3.** The *language* used as a *medium* between the teacher and learner must be *common* to both.
- **4.** The *lesson* to be mastered must be explicable in the terms of truth already known by the learner—the *unknown* must be explained by means of the *known*.
- 5. *Teaching* is *arousing* and *using* the *pupil's mind* to grasp the desired thought or to master the desired art.
- 6. *Learning* is *thinking* into one's own *understanding* a new idea or truth or working into *habit* a new art or skill.
- 7. The *test* and *proof* of teaching done, the finishing and fastening process, must be a *reviewing*, *rethinking*, *reknowing*, *reproducing*, and *applying* of the material that has been taught, the knowledge and ideas and arts that have been communicated (Gregory, 1995: 18–19).

That said, the objective is to have the theories, concepts, and ideas presented become part of your—and your business's—intellectual capital. Gregory tells the story of a boy, "having expressed surprise at the shape of the earth when he was shown a globe." The boy was asked, "Did you not learn that in school?" To which the boy replied, "Yes, I learned it, but I never knew it" (ibid.: 88).

Utilizing price theory, we can gain a better understanding of why human beings behave the way the do, especially—but by no means only—in a business context. The great economist Alfred Marshall, responsible for much of modern economics, defined the discipline as "a study of man's actions in the ordinary business of life; it inquires how he gets his income and how he uses it." Let us continue this study by asking what is conceivably the most fundamental question any businessperson has to answer.