

<<商务统计>>

图书基本信息

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### 内容概要

现在商业竞争日益激烈，有效做出商务决策变得至关重要。本书从实际的商业问题出发，详细阐述如何利用数据进行信息决策，并将统计概念与实际问题联系起来，告诉读者如何寻找模式从数据建立统计模型，以及如何提供调查结果。书中涵盖了应用统计学在当代商务经济领域中几乎所有的重要应用，并且统计软件（包括Excel、Minitab等）的使用贯穿全书。

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### 作者简介

作者：（美国）斯泰恩（Robert A.Stine）（美国）福斯特（Dean P.Foster）斯泰恩，Robert A.Stine，于普林斯顿大学获得博士学位。

自1983年以来他一直在宾夕法尼亚大学沃顿商学院讲授商务统计学课程。

在任教期间，他获得了多项教学奖，包括MBA核心教学奖、David W.Hauck优秀教学奖。

他的研究领域包括计算机软件、时间序列分析和预测、与模型识别和选择相关的一般问题等。

福斯特，Dean P.Foster，于马里兰大学获得博士学位。

他曾在芝加哥大学任教，自1992年以来任教于宾夕法尼亚大学沃顿商学院。

他讲授的课程有商务统计初步、概率论与马尔可夫链、统计计算和高等统计学等。

其研究领域包括随机过程的统计推断、博弈论、机器学习和变量选择。

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版权页：插图：Suddenly, the initial pricing question branches into several questions, and the answers depend on whom you ask. There's variation among customers; customers react differently. One customer might be willing to pay \$300 whereas another would pay only \$200. Once you recognize these differences among customers, how are you going to set one price?

Statistics shows how to use your data——what you know about your product and your customers——to set a price that will attract business and earn a profit. Here's another interesting question: Why does a shopper choose a particular box of cereal?

Modern grocers have become information-rich retailers, tracking every item purchased by each patron. That's why they give out personalized shopping cards; they're paying customers with discounts in return for tracking purchases. Customers keep retailers off balance because they don't buy the same things every time they shop. Did the customer buy that box of cereal because it was conveniently positioned at the end of an aisle, because he or she had a discount coupon, or simply because a six-year-old just saw a commercial while watching Sponge Bob?

Again, variation makes the question hard to answer. If they find that coupons improve sales, store managers might decide to place more advertising in the local newspaper. Patterns and Models Statistics helps you answer questions by providing methods designed to handle variation. These methods filter out the clutter by revealing patterns. A pattern in data is a systematic, predictable feature. If customers who receive coupons buy more cereal than customers without coupons, there's a pattern. Patterns form one part of a statistical model. A statistical model describes the variation in data as the combination of a pattern plus a background of remaining, unexplained variation. The pattern in a statistical model describes the variation that we claim to understand. The pattern tells us what we can anticipate in new data and thus goes beyond describing the data we observe. Often, an equation can summarize the pattern in a precise mathematical form. Background variation represents variation due to factors we cannot explain because we lack enough information to do so. For instance, retail sales increase during holiday seasons. Retailers recognize this pattern and prepare by increasing inventories and hiring extra employees. It's impossible, though, for retailers to know exactly which items customers will want and how much they will spend. The pattern does not explain everything. Good statistical models simplify reality to help us answer questions. Indeed, the word model/once meant the blueprints, the plans, for a building. Plans answer some questions about the building. How large is the building?

Where are the bathrooms?

The model isn't the building, but we can learn a lot from the model. A model of an airplane in a wind tunnel provides insights about flight even though it doesn't mimic every detail of flight. Models of data provide answers to questions even though those answers may not be entirely right. A famous statistician, George Box, once said, "All models are wrong, but some are useful."



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