BUSINESS WISDOM FROM THE MOUTH OF DR. SEUSS

One of the most publicized stories of extremely aggressive development and marketing for a “revolutionary” food product is Dr. Seuss’s *Green Eggs and Ham.*

Like any good salesman, Sam-I-am, the marketer and indefatigable creator of the new product, is full of energy and passion. The story starts with a grumpy “customer” who leisurely reads his newspaper. Using stratagem after stratagem, Sam tries to get his customer to try his revolutionary product: green eggs and ham. The customer repeatedly refuses, claiming he simply does not like it. Sam tries multiple tactics to win the customer, but without success, which, in the end, lead to frustrating trial-and-error iterations, not particularly productive, always painful, and sometimes costly.

Sound familiar?
SELLING BLUE ELEPHANTS

Sam randomly tests different ideas: a train meal ("on a train"), fast food ("in a car"), even an outdoor picnic ("in a tree"). None works. Then Sam tries a "home-made" message ("in a house"). Different packaging options still do not produce expected results ("not in a box"). Sam's emotional messages, playing on the appeal of friendly dinner situations ("with a mouse...with a fox") still fail to increase purchase intent. All those messages fall on deaf ears. Sam's clever insight was to manipulate color ("in the dark"), but by then, it was too late; his customer had already formed new and unwanted preferences, so Sam simply ran out of luck.

Although successful (the product was finally sold, with an ecstatically happy customer as a result), Sam's nonsystematic "trial-and-error" approach was simply too inefficient. Even worse, Sam might well have antagonized his customer during his pursuit, leading to the customer's complete rejection of the product—and possibly the rejection of Sam's whole brand.

What was wrong? Sam felt that he was doing his best. He was sincerely following a typical strategy: seemingly haphazard, random experiments to find a selling formula for his product. Sam wasn't particularly successful, expending lots of energy and going far out of the way to achieve his marketing goal. The missing critical part was the systematic nature of the experiments—or, more correctly, its absence.

Fast-forward. Meet Allison-the-Entrepreneur, a very ambitious and entrepreneurial recent MBA graduate fascinated with Sam's work. Armed with Sam's experience, as limited as it is, and dedication, Allison decided to put an even more revolutionary product, blue eggs, on the market. How would she design and promote her innovative food item in today's highly competitive market of egg-based products? Instead of random, haphazard efforts, we will see how Allison grasps hold of the full power of Rule Developing Experimentation (RDE). Allison-the-Entrepreneur will show how today's new development tools take her far beyond Sam, into a competitive world, with a lot less effort and a lot more success. Indeed, she will soon discover that RDE can help her create, market, and sell virtually any product better and faster. Even selling blue elephants will not be a particularly far-fetched business proposition for Allison!
WHAT IS RDE?

RDE is a systematized solution-oriented business process of experimentation that designs, tests, and modifies alternative ideas, packages, products, or services in a disciplined way so that the developer and marketer discover what appeals to the customer, even if the customer can’t articulate the need, much less the solution!

You got an assignment to launch a new credit card for your bank. How do you make consumers pick your offer out of hundreds and hundreds of lookalikes? The marketing department suggested conducting a survey of a targeted group of consumers. What should customers read in a credit card offer to convince them to apply? Well, what if we just ask them what kind of APR, rewards, annual fees, appearance, name, and so on they’d like? Sounds like a very prudent way to obtain consumer insights to innovate. In fact, a very big chunk of consumer research is still done this way.

As you can guess, the results of this market research exercise turn out to be quite predictable. The consumers want 0% APR, no annual or transaction fees, and, of course, a bunch of meaningful, expensive benefits that are easy for them to earn and to redeem.

Wow! How “insightful” these findings are! But are they feasible? Can you act on them? Did you solve the problem or just identify it? Have you discovered rules as a result of this research, the way the world operates, so you can do far better? Can you even afford the solution?

The challenge is that, in many cases, consumers cannot articulate exactly what they need, want, or like. Is there a way to solve the problem? In focus group after focus group, developers and marketers are often stymied, despite their best efforts. However, the solution comes quickly, often blindingly so, when the developers and marketers take their time to identify and experimentally explore the factors that could drive consumer interest—whether features of a credit card, sweetener for a soft drink, color and picture for a package, or a specific message for an advertisement. Show the customers (or let them try) several systematically designed prototypes, and they will tell what they like, what they do not, and what does not make any difference to them. The experimental design used for the prototypes creation will “magically”
return to you what each individual feature (option or ingredient) “brings” to the party. Now you have a clear way to create rules for winning offerings or new best-selling products by combining those features into the best possible combinations—even if no consumer ever tested these specific combinations. You will see this simple, structured process in many examples later in this book.

Different types of RDE are surprisingly similar to each other. You follow these straightforward steps:

**Think about the problem and identify groups of features** that comprise the target product (offering, etc.). For example, in the case of a soft drink formulation, the variables could be Amount of Sugar, Acid, and so on. In credit card RDE, the variables (categories of features) could be Annual Fees, APRs, Rewards Options, and so on. Every such variable (or a “bucket” of ideas) comprises several alternatives. For example, when you work with a beverage, sugar content may be 6, 8, or 10 units; when you work with a credit card, APR may be 0%, 4.00%, 9.99%, 15%, and 21.99%. So the first step is to do your homework and structure the problem. This is the most difficult part of your job. Here is where your expertise comes in. Be aware of the GIGO (Garbage In, Garbage Out) principle to appreciate the importance of the first step. The good news is that you can throw many ideas into the buckets for customers to test. The rest of the process is highly automated, virtually painless.

**Mix and match the elements according to a special experimental design** (a schema of putting together elements)\(^2\) to create a set of prototypes. The second step is usually done automatically by a tool that creates a unique individual design plan for each respondent, resulting in individual models of utilities for each respondent.

**Show the prototypes to consumers** (or let the respondents taste them, in the case of products) and obtain their reaction (usually, purchase intent, liking, or interest in the idea). The third step is typically an automated Web survey or a taste exercise in a facility.

**Analyze results**\(^3\) (build individual models) using a regression module. The magic of experimental design estimates the contribution of each individual element to the liking scores that a consumer would assign,
whether the contribution is positive (so the liking is higher) or negative (so the liking is lower). Colloquially, analysis shows what everything brings to the party. This analysis is automated. Shortly after completing the survey, RDE tools provide a table of utilities (individual scores of elements), the building blocks of your new products.

**Optimize.** To uncover your optimal product or ideas, you just need to find (usually an automatic process as well) the best, or optimal, combination that has the highest sum of utilities. It is that simple!

**Identify naturally occurring attitudinal segments of the population** that show similar patterns of the utilities. The segments span demographically and socially among different groups of people. By creating rules for the new products or services using the attitudinal segments, it’s possible to increase the acceptance by 10–50% or even more. You don’t have to worry about creating modestly better products averaged for everyone when you can create superb products for selected people. The good part of the process is that it is (as you can guess by now) also an automated procedure.

**Apply the generated rules to create new products, offerings, and so on.** Want to have a credit card optimized for value-oriented middle-aged customers? Just “dial in” the parameters in the tool, and voilà! Here is the best possible offering! Want to offer a credit card for young professionals? You have the data already—just “dial in” what you want, and the rules are immediately generated.\(^4\) This step is the most fun to use.

RDE *breeds* market success through knowledge by clearly and dramatically revealing how specific factors drive consumer acceptance and rejection. Best of all, RDE prescribes for business *what to do*, rather than just leaving the suggestions as hypotheses. RDE produces *actionable* rules (directions), even if there was no inkling or iota of direction about what to do at the start of the RDE process. And best of all, these rules can be the powerhouse for sustained competitive advantage because they *show how the world works*. 
SELLING BLUE ELEPHANTS

THE ROOTS OF RDE

Let’s trace the origins of RDE. It has an interesting history, filled with dollops of experimental psychology, a healthy dose of business pragmatism, and the vision of a new branch of social science.

First, the tools of experimental psychology. RDE is founded on the realization that perception and behavior are linked in a two-way exchange. If you increase the level of sweetener in Pepsi Cola, it will taste sweeter. Liking can change as well—consumers can grow to prefer the sweeter cola. In fact, if you want to create an optimum Pepsi, one strategy changes sweetener level, measures sweetness, measures liking, and finds where liking reaches the highest or optimum level. This is a simple example of RDE. You change the stimulus, you measure the response, you find the pattern or the rule, you make the product, and, hopefully, you succeed in the marketplace more than you did before. So RDE is, in part, a branch of experimental psychology.

Second, the driving power of business. Businesses make products, offer services, and, for the most part, try to do so with some profit. With increasing competition, you are better off when your offering is “new” (at least, perceived to be a fresh idea), “better” (according to the people buying it), and “profitable” (at the end of the day, after all the costs have been factored in). You may be lucky to guess correctly about the product or message in business, if you are the so-called golden tongue, a maverick executive, one of the truly talented. For the other 99% of people, it’s good to know how the world works and the rules by which to make the offering better and cheaper—of course, all the time doing it faster. Unless you are in that 1% of incredibly gifted or lucky predictors, business works better with rules. These rules will tell you how to create winning formulations that taste great, better messaging that grabs customers, better packages, or magazines that fly off the shelf. **RDE is about how best to perform each of these tasks. RDE produces results every time you use it. The process takes just days, not years.** In some cases, the results were obtained in just a few hours. That speed and accuracy are good for business.
Third, the world-view of social science. Formal, scientific experimentation in social science with the express objective of generating rules is just beginning. Not much has been done yet in the way psychologists and business-people do experiments. However, RDE is related to a field called adaptive experimentation (AE), or adaptive management. AE tries to find answers to ecological or social problems through trial and error, using feedback to drive the next steps. At each step in this process, the researcher looks at the data, tries to discern a pattern that might exist, and adjusts the conditions. The most publicized cases of AE are very lengthy, large-scale, even monumental projects in ecology, theoretical science, or the sociology/environmental area. However, AE doesn’t generate rules. Instead, AE searches for workable solutions using the process of experimentation. AE is not defined by a simple experimental structure with finite steps, nor is it governed by limited time frames. RDE comes into social science by using experimental methods to understand the algebra of citizens’ minds.

RDE is not a new idea. Parts of it have been around a long time, but it takes a while to sink in. In some respects, RDE is obvious, in the same way that two well-known platitudes are evident:

- Every parent realizes this simple truth, handed down from mother to child, from mother to child: *Do your homework and you’ll be promoted to second grade.*
- Most people in agriculture realize that the following well-known Irish proverb contains a lot of truth: *The best fertilizer is the farmer’s footsteps.*

WHY RDE?

RDE evolved from other breeds of experimentation because companies recognized the nature of their competitive environment, knew that they had to be “better,” and began to recognize the value of disciplined development. When a few years ago Hewlett-Packard faced a sustained erosion of its position in the market, despite the fact that its products were comparable or even superior to what its rivals offered, management decided to rethink the marketing strategy and build a decision-making structure based on evidence.
In a sense, RDE helped turn around Hewlett-Packard. (See Chapter 1, “Hewlett-Packard Shifts Gears,” for details about the sustained use of RDE in high-tech companies such as HP.) When the goal was to create a better pasta sauce (as with Campbell Soup with its Prego), a good RDE strategy systematically explored the ingredient factors that made pasta sauce better, and soon afterward created a significantly better sauce. (Chapters 2, “Maxwell House’s Calculus of Coffee,” and 3, “Dialing Up Delicious: Major Discoveries from Vlasic and Prego,” show several great examples of RDE use by major food companies.) When the very difficult goal was to create messaging for a better Playtex tampon so women would feel safe and discreet, that, too, was grist for RDE, which optimized the messages every bit as easily as it handled, say, the messaging for computers, credit cards, or cars. (Explore Chapter 4, “How to Make People Feel Good Even When They Pay More,” for RDE use in message optimization.) When the goal was to create better package designs that jumped off the shelf for Swanson frozen dinners, RDE was beginning to be accepted in that world of design and did its job, again with a clear increase in sales. (Chapter 7, “Bridging Cool Design with Hot Science,” demonstrates RDE use for package and magazine cover designs.) Of course, no one would ever claim that experimentation could replace artistry in design, in communication, or even in the technicalities of product creation. It was just that RDE systematized the process of discovery and development.


Sounds good, but shouldn’t one have a triple Ph.D. in statistics, psychology, and social studies to use RDE? And be versed in long formulas with Greek letters? Perhaps, in the early days, but not recently. Now the answer is “Not at all.”

At one time, to drive a car, you needed to intimately know the engine, transmission, and all those complex things under the hood and below the floorboards—and you were expected to fix your car yourself. With time, more people had to drive, and the cars evolved into something easy to use (albeit, much more technologically sophisticated). This, by itself, allowed even more people to drive. How many drivers on the road now even know where the transmission is located? The same is happening to RDE. Something invented and designed by the most educated people in the
industry is now ready to be used by any businessperson with the same ease that today's personal computer can be used. More companies have used RDE on a sustained basis to survive and overpower their brutal competition. This need for RDE enticed the development of new tools that made it easier. In turn, RDE became easier to use, and often with a lot of fun. Applying Malcolm Gladwell's metaphor, RDE is now reaching a tipping point.

FOX HUNTING PRODUCT DESIGN WITH RDE

Let's go to a game called “finding a fox in the forest.” Fox hunting, or transmitter hunting (also known as T-hunting or radio direction finding), is a popular activity among amateur radio operators. We think that the skills acquired in the game might be very useful for the astute business leader or product developer. A skilled fox hunter can find the “fox”—a hidden transmitter—quickly, easily. Can the brand manager, product developer, or corporate C-suite executive learn to find his or her product “fox” as readily? Our quest takes us to the Albuquerque Transmitter Hunters competition.

The transmitters—the “foxes”—are deliberately hidden somewhere and are “hunted” by participants using radio direction–finding techniques. The technique is quite simple. The hunter has a receiver with the large antenna and needs to experiment with the direction of the antenna. Even the smallest tilt of the antenna changes the strength of the signal (the antenna is very selective and has a very narrow angle of vision). Therefore, it is crucial to keep experimenting with the position of the antenna and adjust movements accordingly. Each new adjustment and move ideally brings the hunter closer to the target. Made a wrong step—and the victory is lost to a competitor who found the direction faster.

Sound eerily familiar to what you’ve experienced recently? Think of the last product, the last advertisement, the last package, and what it took to get there. In one variant of the hunt, five transmitters send out the signals in sequence, each of them on for just a minute. The objective: to discover all the transmitters as quickly as possible before time runs out. Hunters need to adopt a working strategy and make a sequence of tactical decisions, not much different from what a developer or marketer does, but rather than competing for customers, the hunters are simply playing a game to discover the transmitters.
It's clear that the game of fox hunting parallels the game of business.

- Firms create new products or services, and, in many cases, they do so in completely new areas (our “wild” forest with hidden transmitters).
- There may be more than one opportunity, so a firm must create a priority list of ideas (a player’s sequence of transmitter hunts).
- Little information is known about these new products or services (unknown location of the “foxes”). One has to listen carefully for weak signals from the customers, who might not even know that they are broadcasting a new opportunity (listen to the receiver).
- To find the new killer idea, the developer or marketer should try many new options, moving gingerly in measured steps to maximize learning and success (rotate the antenna in different directions).
- Sometimes the step is quite small but can produce huge results (the slightest tilt of the antenna can make a big difference in the assumed direction, so get it right).

If you think about this game, you might feel as if you've been hunting foxes your whole life. But, more important, how successful do you think you’d be in fox hunting if you were working with a badly tuned or outdated receiver or, even worse, playing the game without one? You’d see immediately that there would be little hope of winning.

The same applies to the business environment. Without the knowledge and power of RDE, it's likely that you—and just about any other businessperson—will wander around far longer in the search of the new product or message, and quite likely will miss the most valuable opportunities. In the best-case scenario, you will probably find one or a few good workable ideas, about the same time that your competition does. RDE changes those odds dramatically—and, of course, changes them in your favor.
COMPANIES ARE USING RDE, WHETHER THEY KNOW IT OR NOT

You don’t always find what you’re looking for—but you rarely find what you’re not looking for.

Skeptics might say, “Heck, RDE is just a scientific name for trial and error, right?” Actually, yes and no. No, because a trial-and-error approach is usually completely random, and RDE is all the way on the other end of the spectrum. Yes, because you set the scene for profitable learning by astutely designing and executing the trials, by keenly observing the reactions of the customers, by shrewdly detecting what part works and what does not (“errors”), and, finally, by making educated modifications to the trials and iterating the process, if needed. You’ve set up the scenario to learn from your successes and your mistakes. More than likely, you will succeed simply because you have thought through the problem, that inner game so necessary for winning, and you have followed the process, making measurements that quickly yield the rules.

It is difficult to ignore the power of being able to know the algebra of consumer minds before they can even articulate the need. Many companies already use RDE to their advantage, in one form or another. There is every reason for you to be up to speed, or even faster than them.

TESTING NEW ELECTRONIC GADGETS WITH “OTAKU” IN JAPAN

Japan is the home of some well-known examples of product development experiments. Japanese society is less polarized in income compared to the West. People tend to buy products based not on their income, but on their taste. This variation in taste leads to a huge variety of products on the market, brutal competition, and, as you might expect, continual experimentation.

Tokyo is a vast market for testing new commercial ideas. Tokyo’s great size, density, and diversity, and excellent transportation system make it an ideal setting for social experimentation. There are whole districts in Tokyo called antenna districts, where companies and consumers test out the newest product ideas, as well as deliberately start fashion trends. These districts naturally attract otaku (“geeky fans”) and professionals in fashions, electronic products, and so on.
Arguably, Japan’s most dynamic sector is high-tech. In the Akihabara district of Tokyo, sometimes called the “Electric City,” a visitor can buy virtually any product or gizmo that uses electricity. Just a few blocks of densely packed stores sell about 10% of the total electronics in Japan. Here otaku can find products that anticipate the market and that will not be available anywhere else in the world for months or perhaps even years to come.

Many products sold there will never find their way to the shelves of other stores because Akihabara, dubbed as Mecca for early adapters, is also the place for the marketers to test what “flies” with the consumers and what does not. One example is Seiko Corporation. Annually, Seiko develops more than 2,500 watch designs and introduces them in test markets. The winning designs are further improved, tested again, and only then launched in target markets. Japan’s icon, Sony, also develops, tests, and measures about 1,500 products annually. About 20% of them are completely new designs, and only a portion of those find their way to the global market.

Some believe that the global success of Japan’s electronics manufacturers begins in Akihabara. In their race to be the first to market with the season’s latest products, electronics manufacturers send prototypes of their new products to Akihabara to see if they will fly. The rivalry is fierce, with some product lifecycles reduced to a few months, turning Akihabara into a churning, self-renewing experimentation paradise. The sales and feedback are closely monitored by the companies for further modification and the ultimate launch decision. In a sense, it has been done at the expense of traditional market research. On the flip side of this Japanese innovation phenomenon is the fact that some of the most successful products in history, such as Sony PlayStation, have been developed against the corporate view.

KEEPING CUSTOMERS DURING “DOWN TIMES” IN BRAZIL

Could RDE be applied the same way in developing countries as in the U.S., Europe, and Japan? This story in Brazil is a wonderful example of retaining customers by RDE-inspired communications, in a way that shows the importance of a systematic approach in a challenging business environment, where Unilever Brazil was riding the storm of economic uncertainty and massive competition. The Brazilian political and economic climate, seldom calm, had turned volatile in 2002. Consumers
reacted by avoiding many premium brands, Unilever's brands among them. Times were tough in Brazil.

Unilever owned Brazil's market leaders in 14 product categories, distributed among foods, household cleaning, and personal care. These premium names in Brazil included Hellmann's, Knorr, Omo, Comfort, Lux, and the newly launched Dove. Despite the fame and admiration earned by its premium products, Unilever itself was not a well-known brand name in Brazil.

Unilever used RDE to drive messaging by having RDE reveal the “algebra of the consumer’s mind.” By doing so, Unilever discovered the hot buttons to keep the customers. RDE drove Unilever to create three alternative (versioned) executions of its newly developed customer magazine DIVA, and to distribute these to groups of high-value customers, the Unilever target. By monitoring the reactions of the customers, discerning what worked, and then modifying its communications, Unilever created new messages and tapped into the heart and soul of the Brazilian customer.

This systematic approach, promoted by RDE, effectively saved the Unilever business in Brazil. The happy consequence was that, during a recession marked by heavy down-trading in virtually all consumer product categories (especially upscale ones), RDE-driven knowledge of the customer maintained and even increased market share of Unilever's premium products.

This book presents to you many other RDE case histories that have resulted in huge competitive benefits for their users. But the book does more than that. It also teaches you RDE. RDE successes are within reach of most companies and can be dramatic. Some examples that you will see later in this book range from the more than 200% increase in credit card acquisitions to the 42% increase in jewelry catalog response rate with a much higher average purchase at the same time, as well the creation of such iconic products as Vlasic pickles and Prego extra-chunky pasta sauce along with the aspects of the massive application of RDE in China and India. The examples abound.

BUYING IN AND GETTING STARTED

In a natural world, mutation and sexual recombination allow a species to thrive. The same is true for innovation in any type of business: Permanent mindful experimentation enables companies to survive the competition
and succeed. Read on—you will see for yourself that RDE is the easiest, most affordable, and most manageable way to innovate.

What are the key points of RDE to keep in mind when you read on? The bottom line is simple:

- You create a culture of disciplined experimentation and learning that is critical for the competitive market that faces you today.
- You learn while doing. The benefit is simple. You optimize your development and communication over time. This should bring substantially more market success because you are delivering what your customers want, even before they know it—and before your competitors discover it (unless they’re reading this book right now).

We’re not alone in promoting this disciplined experimentation. Two icons in the marketing world, Jerry Wind and Vijay Mahajan, consistently promote the benefits of experimentation because of its “ability to continuously learn, added incentive to develop and test innovative strategies, making it harder for the competition to figure out what your strategy is and creating a culture of experimentation and learning…even more critical in the changing and turbulent…environment.”12

RDE is practical; in many cases, it can be easily handled by a small team or even one person in a very reasonable time with a modest budget. The beauty of the RDE process is that it does not require (nor even expect) deep knowledge in advanced statistical areas.13 RDE generates knowledge and business results at the same time, with relatively little effort, but with enormous payouts for years to come.

So why do you want to read about RDE and use it in your everyday business life? It is quite simple because RDE

- Solves problems instead of just identifying them.
- Generates rules—it’s actionable.
- Needs no advanced knowledge—it’s accessible.
- Promotes logic and learning. No more guesswork is needed when you can be right and “hit the nail on the head” far more often.
- Applies to a wide range of real-life problems. It’s not limited to products or advertising only.
Read on and enjoy this new field of Rule Developing Experimentation. There’s a lot here, and the road beckons.

ENDNOTES

1 Dr. Seuss, *Green Eggs and Ham*, (Random House: New York, 1976). According to Luis Menand (“Cat People: What Dr. Seuss Really Taught Us,” *The New Yorker*, 23 December 2002 and 30 December 2002), this book is the fourth-best-selling children’s hardcover title of all time. The book originated with a wager between Theodore Geisel (Dr. Seuss’s real name) and his publisher, Bennett Cerf. Dr. Seuss won the bet. Forty-nine of the words in *Green Eggs and Ham* are one-syllable words. Cerf made out even better than Menand realized: As Seuss himself noted 25 years later, “Bennett never paid!”

2 See Chapter 4 for more details.

3 In many cases (especially, more simple ones), Steps 4-6 are treated as one step.

4 See, for example, Chapter 4 for Credit Card RDE that has increased new customers acquisition by more than 200%!

5 *American Marketing Association Dictionary of Marketing Terms* defines AE as “an approach (and philosophy) for management decisions, calling for continuous experimentation to establish empirically the market response functions. Most common in direct marketing, it can and has been applied to advertising and other marketing mix variables. The experiment should reflect the needed variation in stimuli, cost of measuring the results, lost opportunity cost in the non-optimal cells, and management confidence in the base strategy.” (Source: www.marketingpower.com)


12 Jerry Wind and Vijay Mahajan, Convergence Marketing: Strategies for Reaching the New Hybrid Consumer, referenced earlier.

13 A big proponent of this approach, Thomas Schelling (Nobel Prize in Economics, 2005), has been known to say, “I think math is used too much to show off. It's a lazy way to write...[the much harder thing is to] write clearly and use analogies that people can understand” (Kim Clark, “In Praise of Original Thought: Tipping Points and Nuclear Deterrence Lead to the Nobel in Economics,” U.S. News & World Report [24 October 2005: p. 52]).