PRODUCT INNOVATION MANAGEMENT

Book Reviews

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Books reviewed in this issue:

- Beyond the Core: Expand Your Market without Abandoning Your Roots
- Lateral Marketing: New Techniques for Finding Breakthrough Ideas
- New Technologies and Environmental Innovation
- World Out of Balance: Navigating Global Risks to Seize Competitive Advantage
- Managing Strategic Innovation and Change: A Collection of Readings

Beyond the Core: Expand Your Market Without Abandoning Your Roots, by Chris Zook. Boston: Harvard Business School Press, 2004. 214 + xi pages. US\$29.95.

Chris Zook's Beyond the Core is the follow-up to his 2001 Profit from the Core, which argued that the source of many failed growth strategies is wrongheaded diversification away from the company's core business. There he examined three strategies for leveraging the core business: (1) strengthen and defend the core; (2) grow through adjacencies; and (3) redefine your core business for new growth opportunities. The current book focuses on the second strategy and considers questions that arise when the core has been fully exploited and growth-hungry companies must look beyond their cores for success. Zook states that companies that successfully push beyond their core businesses into adjacent areas can find this growth. Indeed, Zook states, "companies that outgrow their core competitors for extended periods often do so because they have more success at moving into new adjacencies around the core" (p. 165).

The objective of the book's adjacency strategy is to foster profitable growth with minimal risk by leveraging the core business's customer base, brand equity, supply chain, sales force, product development, manufacturing, marketing infrastructure, and other factors to serve more customers while keeping incremental costs in control. Therefore, adjacencies can be based on products, geography, value chains, channels, customers, or repurposing a core competency.

Three principles characterize successful adjacent moves. First, they must be of significant size or lead to a sequence of related adjacency moves that provide sufficient growth potential. Second, they must be "bolted on" to a strong core business since adjacencies leverage and reinforce the core simultaneously. Third, adjacency moves become more risky as one moves farther from the core. Zook addresses this risk issue by introducing the "new math of profitable growth," which is a repeated sequence of small, adjacent moves that he contends comprise the most powerful long-term growth trajectories (p. 7).

Zook is a director at Bain & Company, and his book seems to be addressing chief executive officers (CEOs) and senior management, who are the customers of his consulting practice. His recommendations are based on substantial proprietary Bain research, which includes the database from the first book (8,000 companies over 14 years), three global surveys jointly sponsored by Bain and *The Economist* Intelligence Unit, analysis of 12 paired comparisons of 24 matched companies, and 100 profiles of companies with the best growth records, from which 25 CEOs agreed to personal interviews.

Although Zook has been heralded for breakthrough thinking, the foundation for his insights is not really new. Adjacency strategies are essentially an BOOK REVIEWS

J PROD INNOV MANAG
2005;22:452–458

operationalization of Ansoff's (1957) "productmarket expansion grid" that is foundational to every marketing management course. Ansoff's strategy for gaining market share by penetrating current markets with current products is Zook's strategy for growing the core business. Introducing new products into current markets is an adjacency strategy that leverages existing brand equity, the marketing, and distribution channels. Likewise, repositioning current products into new markets is an adjacency strategy that leverages the brand, existing product development, the supply chain, manufacturing, marketing, and perhaps the distribution channels to develop these related markets. Zook does not venture into Ansoff's last and riskiest quadrant of diversification where new products are targeted at new markets.

Zook observes that most companies believe they have rigorous criteria for evaluating growth opportunities. Zook debunks this assumption and offers three evaluation success factors. First, the best adjacencies build on and reinforce the core. A strong core is the launch pad for growth initiatives beyond the core. In Zook's paired sample, the fastest growers adhered steadfastly to this tenet. Second, adjacency strategies should be targeted at the most robust profit pools. Mapping the profit pool is a critical task. It depends on crisp segment definitions, sound forecasts, and good cost and pricing data. Few companies do this well, but Zook does not provide much insight on how to accomplish it. Lastly, the adjacency move should enable the company to attain market leadershipequivalent economics, especially in terms of its longterm cost structure. Zook presents several examples of companies that have successfully met these growth criteria (Vodafone, Dell, UPS, P&G, Tesco, Cardinal Health, Staples) and those that have not (Sainsbury, McKesson, Marconi, Eckerd Drug). Hopefully, these case histories are prescriptive for CEOs who need stronger evaluation criteria.

Relentless repeatability, like that of Ben Hogan's golf swing, is the secret sauce for successful adjacency strategies that achieve leadership economics (p. 35). Having a repeatable formula for expansion is the key to growing rapidly in low-growth markets. Repeatability drives productivity improvements through learning-curve effects, reduces complexity, lowers cycle time, provides strategic clarity, and increases understanding through practice. All of these factors have a felicitous impact on costs. Nike was able to use a repeatable strategy to target a sequence of adjacent athletic shoe markets from its running shoe core.

First, it targeted basketball shoes, then tennis, baseball, football, cycling, volleyball, hiking, soccer, and eventually golf. Reebok, on the other hand, did not master the repeatability imperative, and Nike pulled away.

453

In Bain's survey of 138 executives, 65 percent indicated that internal organizational factors were the most important reasons for the failure of growth strategies (p. 142). A primary reason was inadequate management attention given to failing adjacency moves, which often meant that failures were allowed to run too long. Michael Dell organized the corporate reporting structure specifically to track these moves in order to apply more resources to successful moves or to cut poor moves. Zook addresses these organizational issues by offering guidelines for successful management. First, one must evaluate linkages to the core by analyzing shared economics, shared culture and people systems, and shared decision-making. Next, one should consider a range of options for combining with or separating from the core.

It is instructive to contrast *Beyond the Core* with other growth strategy books—specifically, one that precedes and one that follows Zook's work—in order to provide perspective on evolving management thought. *Competing on the Edge* by Brown and Eisenhardt (1998) might seemingly be focused on similar beyond the core issues with similar recommendations for growth strategy. This is not the case. Where Zook cautions companies about risky growth strategies that go too far beyond the core, Brown and Eisenhardt focus on the unpredictable and embrace the notion of major change. They state that competitive advantage is found on the edge between structure and chaos where true innovation begins. Their "edge" is beyond Zook's core.

Kim and Mauborgne's (2005) Blue Ocean Strategy advocates moving from profit pools in the existing market space to new value oceans. Rather than trying to penetrate existing markets or to develop adjacent products or markets, they recommend that companies create an uncontested market space where competition is irrelevant. Blue oceans are advantageous places where demand is unchallenged and growth is rapid and profitable. Technology is linked with elements customers value in order to free the company from an industry's boundaries. Dell's mass production, combined with direct sales over the Internet and product configuration per customer specifications, created a new market space. Conversely, "red oceans" occur where existing firms fight over market share in their

core and adjacent markets and products rapidly become commodities, as competition turns bloody. In Kim and Mauborgne's study of 108 companies, only 14 percent of business launches are categorized as blue ocean. However, they account for 38 percent of revenues and a staggering 61 percent of profits. Red-ocean line extensions and other adjacent strategies were on the losing end of these results. Clearly, from a Kim and Mauborgne perspective Zook is cruising in the red ocean.

A prominent limitation of this book is its lack of an actionable, systematic approach for executing an adjacency move or replacing an old commoditized core with a dynamic new one. Indeed, Zook does not define what the core actually is in this book.

Apparently, the book's conclusions stem from the study of very large companies and may not be applicable to small and medium-sized businesses. Many of the companies in the database are most likely Bain clients and probably are not selected randomly. The CEOs who agreed to be interviewed may have different experiences with Bain than those who did not agree. In any case, Zook appears to have used a convenience sample for the executive interviews and case studies, which brings the representativeness of his findings into question. He does not reveal the research design, methodology, data, or actual results of the analyses. Indeed, we have no readily verifiable assurance that Zook is not marshalling results that fit his criteria for success.

Perhaps the biggest limitation of the book is its lack of attention to the potential for disruptive innovation, competitors' strategy, and changing consumer tastes for negating core and adjacent strategies. The bias is toward internal development rather than growing through external means, such as partnerships and acquisitions. Strategists must integrate both of these growth options in order to pursue advantageous opportunities.

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Kim, W. Chan and Mauborgne, Renee (2005). *Blue Ocean Strategy*. Boston: Harvard Business School Press.

Robert R. Harmon Portland State University **Lateral Marketing: New Techniques for Finding Breakthrough Ideas,** by Philip Kotler and Fernando Trias de Bes. Hoboken, NJ: John Wiley & Sons, Inc., 2003. 206 + xvi pages. US\$24.95.

In an age of globalization, technology advances, increasingly impotent advertising, and expanding consumerism, with competitive intensity and market turbulence on the rise, it is increasingly difficult for companies to remain competitive. Therefore, new product development is as important as ever, for we know "only through the creation of new products in demand in the marketplace can most manufacturing companies sustain their growth and profitability in the long term" (Booz, Allen & Hamilton, 1982, p. 24). Unfortunately, incumbent firms tend to fail in the face of breakthrough disruptive innovations rather than to create these breakthroughs themselves, because their existing processes fail them (Christensen, Anthony, and Roth, 2004; Christensen and Overdorf, 2000). So, how does one go about identifying potentially successful new products for a marketplace that is hypercompetitive and supersegmented? Philip Kotler and Fernando De Bes's book Lateral Marketing offers

To fully appreciate lateral marketing one must first understand what Kotler and Trias de Bes mean by "alternative, vertical marketing," a term used to refer to the classic marketing process of (1) segmenting the market, (2) selecting a target segment, and (3) crafting the marketing mix so that it appeals and is distinct in the minds of those in this target market segment. The result of the repeated application of this process is hyperfragmentation and the proliferation of niche products, which serve ever-shrinking segments with ever-shrinking profits. The recent introduction of Diet Cherry Vanilla Dr. Pepper is a perfect illustration of the perils of vertical marketing. Did the introduction of Diet Cherry Vanilla Dr. Pepper contribute to any new customers, revenue, or profits? Kotler and Trias de Bes, however, are not advocating for the replacement of vertical marketing; they offer lateral marketing as a complementary technique to be used to break out of a cycle of repeated segmentation that has become destructive.

Lateral marketing offers an alternative to vertical marketing. It is based on the work Edward de Bono (1999) in the field of creative thinking in general and lateral thinking specifically. (The work of de Bono is so integral to *Lateral Marketing* that Kotler dedicates the book to him.) Rather than repeatedly dividing up

BOOK REVIEWS

J PROD INNOV MANAG
2005;22:452–458

the market into finer and finer segments and developing products that are more highly correlated with the needs of this smaller and increasingly homogenous group, the lateral market process creates new connections in an effort to identify alternative markets and applications.

The lateral marketing process can be summarized in three steps: (1) pick a focus; (2) produce a lateral displacement to create a gap in a logical thought process; and (3) consider new ideas for spanning the gap. The focus can be at the market-definition level, product level, or the marketing-mix level. If the focus is at the market or product level, a displacement creates a gap, which promotes birth of new markets or product categories. Alternatively, focusing on the marketing mix (pricing, promotion, place) leaves the market and product connected and leads to the generation of new subcategories.

For the second step—producing a gap through lateral displacement—Kotler and Trias de Bes refer to six strategies proposed by de Bono for creating lateral displacements:

- substitution
- inversion
- combination
- exaggeration
- elimination
- reordering.

Each of these strategies may be applied to a focus level to generate a nonlogical gap. For the third step of the lateral marketing process, a new connection must be made to close or cross the gap created in the previous step.

To illustrate the process, consider the popular Apple iPod. Since its original introduction there have been at least three subsequent generations and a new product line, the iPod Mini. All of these product introductions are the result of traditional vertical marketing. The products are a little bit bigger, a little smaller, or more colorful; they have a longer-lasting battery or hold a few more songs. Rather than continuing down this path, which leads to supersegmentation, Apple could apply the lateral marketing focusing at the product level. To stimulate a lateral displacement, ask de Bono's six questions:

- (1) Substitute it: iPod replaces radio (rather than replacing CD players).
- (2) Invert it: Use iPod for recording music rather than just playing music.

(3) Combine it: iPod works as a recorder as well as a player, or even as a satellite radio receiver.

455

- (4) Exaggerate it: iPod with better sound quality than a CD.
- (5) Eliminate it: iPod that does not need a cradle or cable to connect to a computer or does not need a computer at all.
- (6) Reorder it: music goes from iPod to the computer.

After creating potential lateral gaps, in the third step the gaps are bridged with new innovative breakthrough product concepts. In this case imagine a product that functions like TiVo (a type of digital video recorder) for satellite radio, recording multiple channels in high-fidelity sound quality and permitting the user to time-shift the schedule. In addition, favorite programs could be uploaded to a computer over a wireless network and archived.

Kotler and Trias de Bes illustrate wonderfully the relative simplicity of the lateral marketing process with language that is easily understood by a broad audience. Part of the fluidity of this book is the tone in which it is written. It artfully avoids being bogged down with difficult technical terms and impractical, "fluffy" language; it is not padded with chapter after chapter of case-study exploits from a lifetime of consulting. Kotler and Trias de Bes tie up the book with a plan for implementing lateral marketing and a simplified framework of the process. Like all books on creativity, this book suffers from some examples that seem to lack creativity. However, we must remember that despite great tools, creativity remains hard work, and it is probably a bit much to ask Kotler and Trias de Bes to illustrate every point with a breakthrough idea. If you have already read the books on creativity by de Bono, Michael Michalko (1991), or Arthur VanGundy (1998) and can apply them in a new product development context, this book offers you very little.

Other marketing professionals, however, could gain new skills from this book.

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New Technologies and Environmental Innovation, by Joseph Huber. Cheltenham, UK: Edward Elgar Publishing, 2004. 335 + xxiv pages. US\$110.00.

This book is about new technologies and a new approach to policy that would result in better long-term protection of the environment than the current emphasis on "end of pipe" approaches, such as sewage treatment and automotive catalytic converters that clean up pollution after it occurs. Joseph Huber refers to such technological environmental innovations (TEIs) as "upstream approaches" and underscores their technical benefits of enhanced efficiency, operational safety, and reliability. Examples of such upstream approaches include fuel cells and photovoltaics that, unlike producing electricity from fossil fuels, do not pollute the environment in use.

Largely academic and government-policy focused, this book will be most useful to research and development (R&D) professionals and inventors looking over the horizon for new opportunities. Business-people willing to slog through a fairly technical tome will be rewarded with an eye-opening discussion of global environmental problems and the extensive changes in society and business that are necessary to solve them. In addition, they can expect a well-written description of the pros and cons of many emerging environmental technologies that will likely reshape our lives and businesses in the coming decades.

The book includes four sections. The first, an introduction, lays out a convincing case for developing TEIs as the most efficacious strategy for environmental protection. According to Huber, supporting TEIs is more fundamental to environmental protection than many activities that are the focus of much current activity—for example, changes in consumer behavior, product or process design, financial policy, or how businesses manage themselves environmentally. The author calls for a new paradigm for environmental protection termed "coordinated inno-

vation"—supporting the development of promising new technologies in the early stages of their lifecycle, with a corresponding shift in environmental policy away from "command and control" regulation of older, more mature technologies. If Huber had his way, government and business would focus jointly on developing clean car technology, or even better, new land-use policies that reduce the need for cars altogether, rather than require car owners to maintain catalytic converters on existing (combustion engine) vehicles.

The second section provides an extremely impressive technical discussion of the pros and cons (environmental and economic) of an encyclopedic array of TEIs from a variety of diverse fields that Huber believes require the greatest attention. These fields include energy, agriculture, chemistry, biotech, materials, construction, vehicles, and consumer goods. From the energy section, for example, the reader learns

- why fossil fuels are unsustainable
- why, surprisingly, biofuels, such as methanol and ethanol, may not be much better—Huber calls them "quite 'dirty' in every respect" (p. 75)
- why hydrogen, which can be burned in industrial furnaces and in internal-combustion engines (like gasoline) as well as used in fuel cells, is the "obvious" alternative.

A short chapter follows this on the need for policy interventions. The book ends with a comprehensive synopsis of generic innovation theory (S-curves and the like).

Given the emphasis on policy interventions in the book's introduction, one might have expected more attention to the subject than Huber offers, including case examples of successful interventions from the past. Also, the discussion of generic innovation theory seems out of place in this book, as it does not clarify how such theories might apply to environmental technologies in particular.

The book provides noticeably few examples of inmarket successes of technologies in specific commercial applications (e.g., Toyota's Prius hybrid engine car; BP's photovoltaic business), thus potentially limiting its appeal among product developers looking to build a business case. For businesspeople trapped in fear or confusion-induced inertia about which technologies to invest in, Huber's discussion provides well-written and thoughtful guidance on how to prioritize environmentally sound technologies BOOK REVIEWS

J PROD INNOV MANAG
2005;22:452–458

according to future environmental protection and investment worthiness. Of particular usefulness may be an 11-page appendix of extant TEIs and an extensive bibliography.

Readers familiar with McDonough and Braungart (2002) will notice a similar macro-orientation and call for development of a new industrial age to preserve the environment. Both books underscore the need for "eco-effective" strategies consistent with nature's ability to metabolize wastes. Huber's book, however, is eminently more practical, with an emphasis on concrete technological solutions to environmental problems, in contrast to McDonough and Braungart's more philosophically oriented discussion, with its focus on product and process design.

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Jacquelyn A. Ottman *J. Ottman Consulting, Inc.*

World Out of Balance: Navigating Global Risks to Seize Competitive Advantage, by Paul A. Laudicina. New York: McGraw-Hill, 2005. 236 + xvii pages. US\$27.95.

Paul Laudicina claims that the world is undergoing unprecedented changes that will have a major impact on how we conduct business. Although his aim is to prepare business in general for the risks and opportunities involved, this book also has much to offer the product developer. He describes

- market shifts that will open new markets and will close established ones
- consumer changes that will alter the way individuals evaluate, use, and dispose of products
- demographic, environmental, and regulatory changes that will necessitate new ways of developing products.

Laudicina organizes the book nicely into five "drivers": globalization, demographics, consumers, natural resources and the environment, and regulation and activism. Each of these five is the topic of a chapter, and each chapter subdivides into subtopics.

For instance, Laudicina divides natural resources and the environment into water scarcity, energy shortages and maldistribution, and climate change (global warming). He maintains that growing water shortages in certain parts of the world are creating both problems and opportunities. "Already, there are more water refugees—people who have left their homes in Mexico, Somalia, northern China, Nigeria, and Iran to find water—than there are war refugees in the world" (p. 104). Viewing this as an opportunity, General Electric (GE) has built a US\$1.4 billion business in water-treatment chemistry and membranes used in water treatment (p. 116). In discussing the energy shortage, the author points out that most of the predominant form of energy in use today, oil, lies under politically unstable areas. Saudi Arabia, for example, is a major powder keg. Another energyrelated problem is that China is using escalating amounts of coal, which is the dirtiest of fuels. Again, GE has taken advantage of this by creating a rapidly growing US\$1.2 billion wind-energy business (pp. 123–124).

457

The author presents his case using a huge assortment of facts, including 425 endnotes. His careful organization of this volume of information helps the reader stay focused. However, even with such a large number of endnotes, many of his facts (e.g., the quotation on water refugees just mentioned) are not referenced. The index lists the names of people or organizations mentioned, but indexing of concepts is limited. More fundamentally, this book is limited by being presented from a businessperson's perspective: Laudicina is a vice president with A.T. Kearney. For example, the author does not mention the similarly titled book, *World on Fire* (Chua, 2003), which from more of a social science perspective presents some sobering consequences of globalization.

In summary, this book presents the thoughtful product developer with a broader, longer-term picture of her environment than usual, which could suggest new products or decaying markets, and it might suggest changes needed in one's product development process to cope with or exploit such trends.

Reference

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Preston G. Smith New Product Dynamics

Managing Strategic Innovation and Change: A Collection of Readings, 2d ed., edited by Michael L. Tushman and Philip Anderson. New York: Oxford University Press, 2004. 635 + xvi pages. US\$60.00 (paperback).

JPIM does not normally review anthologies, much less second editions of reading collections. However, I found the first edition very useful (see review in JPIM, January 1999) and am delighted to be able to recommend this second version of the book just as highly.

This edition retains the strong sense of focus and perspective of the first one. As the authors aver, it is designed for M.B.A. and professional courses that focus on technological innovation and change. The 40-odd articles are drawn from a variety of appropriate sources, including excerpts from professional books (10) and articles from leading management journals, such as *California Management Review* (8), *Harvard Business Review* (4), and *Strategic Management Journal* (3). About three fourths of the entries in this second edition are new. All of the articles include extensive references, and the whole collection includes a comprehensive index.

Michael Tushman, now at Harvard Business School, and Philip Anderson, now at INSEAD, did more than simply replace older essays with newer ones. They also added new sections of readings. To be sure, important older sections remain, including the Overview (Part I), Innovation over Time (Part II), Historical Context (Part III), Organizational Architecture (Part IV), Managing Linkages (Part VI), and Executive Leadership (Part VII). However, substantially new here are major sections devoted to innovation and business strategy (Part IV) and, above all, to knowledge, learning, and intellectual capital (Part V).

With respect to Part V, the editors define this intellectual capital not just in terms of patents and technological know-how but in terms of general

systems and procedures as well. They stress the need for managing the acquisition, transfer, and application of knowledge because of its cumulative effects and its importance in defining long-term competitive advantage. This section is typical of this book. It includes a short but excellent prefatory note and four articles: two conceptual in tone and two detailed case illustrations of the challenges involved. The first case deals with Hyundai Motor's long-term knowledge of acquisitions strategy and the second with collaborative learning from networks and alliances in the biotech and pharmaceutical sectors.

Make no mistake about the book. This is not a "how to" offering in the sense of templates or checklists for routine problem-solving in the new product development sector. It is rather a collection of stimulating conceptually oriented essays and detailed case analyses, solidly grounded in research that should stimulate the thinking of the thoughtful manager, whether a tyro or a grizzled professional. A bonus is that the extensive references and index facilitate pursuing particular ideas or thoughts.

Any book, of course, can be criticized because of what it does not contain. For example, there is very little on the identification or assessment of markets or on the design and execution of business or marketing plans. However, other quality books address these more applied issues.

This anthology, as its title implies, is strategic in orientation. It is not tactical or programmatic in character. The publisher advises that the authors' first edition was a best-seller. I see no reason why this second edition should be no less well received by scholarly and professional audiences. Critically speaking, it is a winner!

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Vol. 22, No. 5