Where is product development headed? What will the emphasis be in a decade? Our first two reviews provide two completely different answers to these questions. Michael McGrath, drawing a parallel with how information technology has transformed manufacturing, sees a move toward greater productivity and uniformity, assisted by modern technology advances that manage project knowledge better. This presumably leads to lower cost and higher quality.

In contrast, Jim Highsmith and Ken Schwaber envision shifts toward greater agility to cope with growing uncertainty in markets, technologies, customer perceptions, and management direction. The benefits claimed are greater responsiveness and higher customer satisfaction.

The good news is that this is not necessarily an either-or situation. See the review of *Balancing Agility and Discipline* in the March 2005 issue of *JPIM*.

Books reviewed in this issue:


  In his fifth book, *Next Generation Product Development (NGPD)*, Michael McGrath gives us a look into his crystal ball at the next generation of product development best practices. McGrath dubs the next generation the Research and Development (R&D) Productivity Generation, in which the two main themes are resource capacity improvement and inclusion of the whole enterprise in product development decision-making. This emerging generation is now under way and is enabled by a new breed of enterprise management information systems. These systems are, in McGrath’s opinion, key to and requisite for experiencing the predicted R&D productivity gains. He has a stake in the success of this new information technology (IT) niche as founder and chair of Integrated Development Enterprise, Inc. (IDe), a provider of web-enabled tools to support the growing information demands of the project managers and corporate decision-makers.

  McGrath is a pioneer in product development practices. Product and cycle-time excellence (PACE) is a phase review new product development (NPD) model codeveloped by McGrath (McGrath, 1996) that has been rolled out to over 200 organizations since its introduction in 1987. In the previous rendition of PACE, the Time-to-Market (TTM) Generation, the key motivator was faster time to market. This generation focused on individual projects, and according to McGrath, three areas of improvement characterized it: phase-based decision process, the core-team organizational model for project teams, and the application of standard development practices across
all projects. While the TTM Generation focused on individual project excellence, the R&D Productivity Generation will concentrate on the bigger picture: the portfolio of the entire enterprise. The author notes that “the maturing of the TTM Generation coincided with an historic downturn in the economy” (p. 20). This event in corporate America’s history is probably the most important factor that forced companies to try to do more with less and to look to different strategies to increase production without adding headcount.

The book begins with a look back to previous generations of product development to set the context for the next generation. The author begins with the Project Success Generation beginning in the 1950s, followed by the TTM Generation. Subsequent chapters cover various levels of detail on evolving best practices for resource management, capacity utilization, project management, portfolio management, collaborative development, project team structures, knowledge management, and product strategy. Each chapter provides the reader with McGrath’s vision of future best practices, many of which are yet to be fully vetted with real industry experience.

For much of the book, McGrath is in concert with many other project management gurus including the importance of integrating enterprise financial management with R&D. Project financials are still a key indicator of a project’s success or failure. Project managers and decision-makers alike can use real-time financial data to their company’s advantage.

For the most part, McGrath aims at mature senior managers of large companies. His book is about decision-making in NPD, rather than detailed development. McGrath uses a hypothetical company throughout the book to illustrate the practices he introduces. Although this technique works well, it tends to make the chapters long and somewhat repetitive. Some readers might be put off by this device; however, when the reader gets through the forest of examples, there are definitely some nuggets of wisdom to be gleaned from this guru.

Following a popular trend, McGrath introduces a maturity model that integrates the three most important process areas for the next generation: project management, resource management, and portfolio management. He uses this model to show the reader that achieving excellence in NPD is expected to be an evolutionary journey. Benchmarks and measurements along the way show an organization’s continuous improvement within the model.

McGrath introduces a benefit model to quantify the financial impact of improvements in various areas of product development. This model helps a manager decide where to allocate precious improvement funds. It also provides quantitative evidence for functional and project managers to use for justifying improvements to the decision-makers. Although McGrath uses the model to illustrate its utility for his hypothetical company, it would have been better to use real data if it were available.

In the section on resource management McGrath provides an excellent rationale for focusing on this area as the “untapped opportunity for most companies” (p. 50) to increase productivity. He makes a point that a high level of utilization is not the same as being busy. McGrath provides some guidance here in pointing out the difficulty in measuring utilization. He suggests that measuring utilization based on assignment projections rather than from actual time collection is easier and better for looking forward. High utilization requires focus on the strategic objectives of the company. The next generation will be able to accomplish this if they follow the recommendations of the author.

This reviewer still has a few remaining questions:

1. Are enterprise information tools mature and robust enough to provide a return on investment? The Gartner Magic Quadrant for Project and Portfolio Management (a yearly review of tools in this category) shows an ever-maturing set of viable options in this tool-suite space. However, this reviewer’s experience with a few of these tools suggests that they are still immature and expensive. Any return on investment analysis that is done needs to include the question of what the consequences are if we do not invest in this technology.

2. Are organizations ready for the cultural changes required to follow through and adopt these practices and use these enterprise-level tools? This is a tough question to answer, and McGrath avoids it. Cultural change is difficult, but the results can be dramatic. Cultures can change, but it takes time, often more time than one would plan.

3. Are these practices (and the requisite tools) viable for the smaller company? Smaller organizations tend to need less process and use fewer tools than larger companies. Small companies do not have the financial assets to invest in enterprise information systems. But small companies must grow and survive. Best practices and processes may be able to be
tailored. Homegrown or low-end tools may be able to satisfy the needs of smaller companies.

Reference


Paul A. Szulewski, PMP
Mercury Computer Systems, Inc.


Have you found yourself wondering about how to cope with ever-shrinking innovation cycles, how to stay ahead of your competitors, and how to introduce new products quicker into the marketplace? Are you concerned about coping with radical innovation, employing new technologies, and creating products for uncertain market segments? Are you facing increasing product complexity having to cope not only with mechanical and hardware but software-related issues as well? Agile management methods and techniques focus on these challenges, thereby increasing productivity and employee morale.

Agile project management practices are neither new nor exotic. Companies like Toyota, Honda, Canon, Fuji, and others have successfully applied them for decades (Takeuchi and Nonaka, 1986). Nevertheless, agile project management introduces deep change to the way we manage product development projects. It redefines leadership along with essential roles and responsibilities, requires cross-functional project teams, and puts an emphasis on the collocation of project members, to name only a few critical differences. The two books reviewed here provide essential insight into how to leverage the benefits of agile project management practices and illustrates their impact on the performing organization. They do not intend to cover agile engineering practices, such as extensive prototyping and frequent integration.

Agile Project Management provides a good introduction to essential agile project management principles and practices. Jim Highsmith is a highly recognized software development consultant, but this book shows how agile management helps to bring innovative products to life independent of whether they incorporate software, hardware, or mechanics. The target audience is project managers, but the book also is well suited for engineering managers, product managers, and quality analysis (QA) experts.

Chapter 1 argues that new product development challenges, such as high degree of uncertainty and shrinking time schedules, together with lower-cost experimentation approaches, such as BMW’s car-crash simulation, both call for adaptive rather than anticipatory project management. Frequent develop–inspect–adapt cycles characterize the former, whereas the latter tries to establish a detailed plan upfront and then execute it. Chapter 1 also introduces the reader to the core agile values as stated in the Agile Manifesto (www.agilemanifesto.org).

Chapters 2 and 3 introduce six guiding principles of agile project management, including delivering value, delivering features iteratively, and building adaptive teams. These six principles, which Highsmith considers mandatory because they establish the culture required to succeed, form an underlying system of positive beliefs that are the basis of agile project management.

Chapter 4 provides an overview of Highsmith’s agile project management framework comprising five project phases. The envision phase establishes the product vision, project scope, and team characteristics. The speculate phase creates a high-level project plan including major milestones and iterations. The explore phase delivers tested intermediate product versions using iterations, thereby delivering the critical and high-risk product features first. The adapt phase builds on the results achieved in the explore phase and iteratively brings the product closer to its completion. Finally, the close phase concludes the project. Notice that this iterative style is fundamentally different than the linear sequential approach used by processes such as Stage-Gate®.

Chapters 5 through 8 address the phases and their associated practices in detail, essentially interpreting the phases in terms of the aforementioned Agile Manifesto. For instance, Highsmith describes a Customer-Team–Developer-Team Interface practice to facilitate collaboration with customers. Chapter 7 describes agile techniques for customer interaction and decision-making, which is a particularly noteworthy topic.
Since agile project management delegates authority to those best positioned to make a decision—and at the same time requires a high amount of teamwork and collaboration—the project manager no longer solely makes decisions to be executed by team members. Team members themselves are responsible for making decisions for which they are held accountable. The practice called participatory decision-making, based on Kaner et al. (1996), does a great job at introducing techniques for reaching sustainable agreements effectively.

Chapter 9 discusses scaling agile project management approaches to large and distributed, and chapter 10 covers cultural changes required to deliver innovation consistently by employing agile practices.

The book provides examples from various industries, ranging from drilling machines to avionics equipment, to illustrate the application of agile management practices. On the downside, a single example that runs from chapter to chapter is missing. More references to case studies that demonstrate the successful application of specific management practices also would be desirable. In general, the book is a very worthwhile read. We have used the practices successfully with our clients.

Agile Project Management with Scrum demonstrates in an excellent manner how the agile project management method Scrum has been used successfully for more than a decade on numerous software development projects. More recently, Primavera, best known for its project management software suite, embraced Scrum’s project management practices to develop their latest product (Martin and Schwaber, 2004). Scrum is not limited to software development, however. Its practices also can be applied easily to other types of product development. This is highlighted by the fact that Scrum is based on practices pioneered by Honda, Canon, and Fuji, among others. The book’s author, Ken Schwaber, is a highly recognized software development consultant and one of the originators of Scrum.

The book provides essentially a collection of case studies—including lessons learned from each—that illustrate how different companies have applied Scrum project management practices. The companies include a financial institution, a medical service provider, and a gas pipeline-leasing firm. Even though Scrum’s practices are common sense and simple, applying them consistently proves to be a challenge for many organizations. If you are more interested in the Scrum method rather than its application, we recommend Schwaber and Beedle (2001). The target audience of Agile Project Management with Scrum is project managers, engineering managers, product managers, and QA experts. You do not need to be a software expert to appreciate this book.

Chapter 1 briefly introduces the Scrum framework together with its essentials roles, artifacts, and practices, thereby laying the ground for the rest of the book. An even crisper summary of Scrum practices appears in Appendix A.

Chapters 2 and 3 show how Scrum management responsibilities differ from traditional ones by introducing the three essential Scrum roles: ScrumMaster, Product Owner, and Team. Notice that Scrum challenges the traditional leadership notion according to which the manager primarily decides on the course of actions. Instead, project members are authorized to make tactical decisions but also are held accountable for them on a regular basis. The ScrumMaster (project manager) acts as a leader, enabler, and facilitator by helping the team to come to sustainable decisions quickly and by supporting the team in staying on track.

Chapter 4 shows how various organizations leveraged Scrum benefits using self-organization, empowering the Team, timeboxing, dividing the project phases into mini-projects called sprints that typically last 30 days and whose end date cannot be moved, and incremental delivery, delivering a tested intermediate product version at the end of each sprint.

Chapter 5 covers the role of the Product Owner, who is responsible for the product features together with their prioritization. This person is also responsible for profitability of the product version under development. The Product Owner accepts the work results delivered by the Team at the end of every sprint. She then may add new product features and reprioritize the features. A customer or product manager typically fills the Product Owner role.

Chapter 6 introduces Scrum’s adaptive planning techniques, which allow reacting to changes quickly and involve the team heavily. Chapter 7 covers project reporting, at the heart of which are so-called burn-down charts that portray how much work has been accomplished and how much work remains to reach both the current sprint’s goal and the overall project goal.

Chapter 8 shows how teams transitioned to a self-managed and self-disciplined project community. Taking on more responsibility can be challenging for project members used to working in a culture where they execute assigned tasks, and a blaming game starts when problems arise. Chapter 9 illustrates...
how large-scale distributed project teams of up to 1,000 members can apply Scrum.

A nice feature of the book is that it provides numerous real-world case studies that illustrate how Scrum practices actually work. We particularly like how Schwaber structures chapters to provide subsections with lessons learned. The main shortcoming of the book is that it requires the reader to have a basic Scrum understanding or to pick it up quickly while reading the first chapter.

We have used this book successfully to introduce Scrum project management practices in our own firms. Its hands-on description of the challenges faced and approaches taken by others have benefited our customers and us greatly. We recommend reading this book to discover how agile project management practices are applied.

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Siemens AG

Stefan Schulze
European Synchrotron Radiation Facility


When a book appears in its third edition one can assume that it has sold well in its earlier ones. Thus, it seems surprising that this journal has not reviewed either this book or any other of the more than 100 listed on Amazon.com on the subject of market segmentation.

Market segmentation, with the objective “to analyze markets, find niche opportunities, and capitalize on a superior competitive position” (p. 5) is indeed a very popular management tool according to a recent study (Rigby, 2003) ranking fourth after such steadfast as strategic planning, benchmarking, and mission and vision statements. A full 79% of the surveyed companies professed to its usage. However, the 2004 Comparative Performance Assessment Study (CPAS) (Adams and Boike, 2004) discovered that niche strategies overall may have moved slightly out of favor.

Be it as it may, the Handbook of Market Segmentation “was written to provide marketing/business practitioners and scholars (professors and students) with an informative, state-of-the-art guide to strategically segmenting high-tech and industrial markets” (p. xiii). It should enable one to define the research objective of a study, to navigate around common pitfalls, and to evaluate its outcome. However, the reader will not be able to conduct his own segmentation study from the knowledge contained in this book alone, since this book does not describe statistical procedures often used to uncover differences among customer groups (Wedel and Kamakura, 2000) as well as necessary market research techniques, such as survey design, focus groups, and interviews. The book has four major parts.

“Part I: Segmentation Planning” (chapters 1–3) provides an overview of market segmentation and niche marketing, market definition, designing segmentation studies, and using segmentation research. Chapter 2, on defining one’s market, covers the often overlooked topic of setting a boundary on the market to segment, the equivalent of a market preselection.

Chapter 3 outlines a 10-point program for segmentation planning with such steps as establishing objectives, selecting segmentation bases, and knowing how the information will be used. While this 10-point program prescribes a common-sense approach, the author’s view of research objectives as “a checklist of information needs useful for strategy development” (p. 37) does not help much in defining the research problem. The author could have developed further the tie between segmentation bases and specific strategic, tactical, or operational problems to be solved. However, strong points in this key chapter are the lists of potential segmentation roadblocks, criteria for segmentation viability, criteria for segment formation, and 20 common business segmentation bases.

“Part II: Business Segmentation Bases” (chapters 4–7) “details the major business segmentation dimensions, i.e., geographics, firmographics, usage, benefits, purchasing behavior, organizational psychographics, and buyer adopter categories” (p. xvi). It also covers the new North American Industry Classification System (NAICS), business census products, and a model
for segmenting industrial markets. These chapters do an admirable job in explaining the various bases, their use, and potential data sources. One quip: there is no apparent link to the list of bases and their categories listed in chapter 3. For example, one does not find a category of segmentation bases focused on “Decision Makers/Decision Making Units” (p. 40) in Part II.

“Part III: Implementing Segmentation Strategy” (chapters 8 and 9) discusses target marketing, segment attractiveness, positioning, marketing strategy formulation in business markets, building a segmentation-driven organization, implementation issues, segmentation audits, and business segmentation challenges.

Chapter 8 on “Strategic Target Marketing,” after a short description on market segment selection, contains a review of the marketing mix with limited connection to segmentation. The question of how one uses the outcome of a market segmentation study is so central to this topic that I would have liked to see recommendations on how to deal with acceptance problems, to promote adoption, and to make use of the collected data for product strategy development.

Chapter 9 on “Enhancing Segmentation’s Value” is about improving segmentation practices in organizations. The author proposes a “segmentation audit,” which apparently consists of a marketing audit with subsequent interpretation toward segmentation. I confess that the value of that approach eluded me as it seems feasible to audit just segmentation-related practices using similar criteria to those put forward in the “critical examination of one’s segmentation practices” (p. 17) in chapter 1.

“Part IV: Segmentation Strategy Cases” presents six examples of business segmentation approaches and strategies from Collins Aviation Services, DevSoft, Dow Corning, Lexmark International, Pharmacia Corporation, and Sportmed. The selection of cases provides a wide variety of segmentation problems and allows the reader to apply the covered concepts helped by end-of-case questions and reading suggestions.

Segmentation is a useful tool to allow the firm to customize its products and services and by doing so to enhance their value to the customer. Choosing segments to target can be a key strategic consideration for the firm as a whole. The individual product manager also can use segmentation to improve product definition, pricing, and positioning. When so used, the segmentation bases become much narrower, and segments may be defined more clearly. It is not necessary to view segmentation as a corporate marketing tool alone.

Unfortunately, the author has fallen prey to seeing his subject as much more encompassing than may be justified in many companies. This is excusable in that authors on such subjects as pricing, product definition, project management, and a variety of other managerial topics have committed similar “crimes.” However, it weakens Parts II and III, which could have benefited from a treatment of segmentation practices at the working or product management level.

While handbooks in other areas often make use of multiple authors to provide a balanced view, the author compensates by drawing heavily on outside sources, as evidenced by the seven pages of references for the main text, plus multiple reading suggestions for each case. He reproduces checklists and criteria from these references, which lead to authoritative coverage of the subject. The author also does not limit himself to presenting a balanced and comprehensive view of segmentation itself but strives to put segmentation into a larger context. Consequently, this handbook is well worth keeping near one’s desk.

References

Ruediger Klein, NPDP
Lucent Technologies


Marketers are now required to become increasingly customer focused across all functions of their organizations. Both Simply Better and Marketing as Strategy present a strong case for this marketing transformation, though they take very different approaches. Simply Better proposes a return to the
fundamentals, while *Marketing as Strategy* proposes major transformations that help "managers go beyond best practice to next practice" (p. 10).

*Simply Better* carries two major themes. The first is the contention that competitive advantage does not depend on uniqueness of the product/service but rather depends on giving customers what matters to them most. The second theme contends that companies often fail, not in the choice of strategy but in its execution.

Author Patrick Barwise is a professor of management and marketing at London Business School, and Sean Meehan is Martin Hilti Professor of Marketing and Change Management and director of the M.B.A. program at IMD, Lausanne. The authors claim that their book is based on scholarly work from published academics and input from the executive community. The book draws heavily from examples of Hilti, a manufacturer of professional construction products. Experienced managers represent the target market for *Simply Better*.

Barwise and Meehan take a counterintuitive approach that positions a new brand head-on to major market players. They encourage the reader to "consider this approach, but to be prepared to address many different issues before they proceed" (p. 15). This is quite different from Clayton Christensen’s disruptive approach of first commercializing in small emerging markets (Christensen, 1997). The authors also speak against conventional wisdom in stating that unique selling propositions do little to create sustainable competitive advantage. They believe that "customers rarely consider uniqueness when purchasing a product or service, but rather consider if the category of the product or service meet their needs" (p. 17).

In addition, they emphasize market immersion as one of the most effective practices senior executives can take. The authors provide Hilti as an example of a company that takes the practice of immersion seriously. Executive board members go into the market at least 50 days a year to listen to their customers. According to the authors, this has led to Hilti’s success in discovering new markets and products.

The authors also state the importance of complementing primary data with an understanding of the competition. They provide an approach that gains insight into your competitors’ minds and some examples of developing a dynamic competitive analysis that all members of the organization contribute to daily, as opposed to a stagnant competitive report that is written annually by the strategy department. This was one of the most insightful sections of the book.

While Barwise and Meehan believe that out-of-the-box thinking is imperative for advertising, they believe it is detrimental for innovation. For example, the authors state that "Target’s strategy didn’t emerge from out-of-the-box thinking, but rather from the ability to execute both in operations and great branding and communications" (p. 115). The authors state that marketing should take a broader view that aligns the whole organization to meet customers needs better. They propose that functional marketing needs a home. However, they believe that it is imperative that the role of marketing promotes ubiquitous customer focus throughout the entire organization.

Barwise and Meehan believe that the "out-of-the-box approach represents the 1990s, and the return to fundamentals is today’s big idea" (p. 169). Fundamentals include (1) total quality management; (2) understanding and delivering on customers’ priorities; (3) delivering value on product categories versus differentiated products and services; (4) providing generic category benefits for which customers are willing to pay; (5) out-of-the-box thinking on advertising; and (6) market immersion to understand your customers.

*Simply Better* demonstrates that many companies are still far from meeting the basic needs of their customers. According to the American Customer Satisfaction Index (ACSI), aggregate satisfaction is lower today than in 1994 (p. 9). These statistics make for a convincing argument that companies are far from providing the basics in meeting customer needs.

Too few examples are provided to illustrate the benefits of some major points within *Simply Better*. For instance, the merits of a strategy for new businesses to face major competitors head-on are illustrated by the success of only a single company, Orange. The authors also appear to depend unduly on the company Hilti for providing examples to support their approach. Overall, I appreciate the alternative approach the authors take, and I recommend this book to readers who suspect that they are forgetting the importance of business fundamentals.

The major premise of *Marketing as Strategy* is that marketing has lost its strategic role within the organization. According to a U.K. study, "companies revealed that just 18% of executives rated marketing’s strategic effectiveness better than good, while 36% rated it as fair to poor" (p. 2).

Nirmalya Kumar, the author, is currently professor of marketing, director of the Centre for Marketing, and codirector of the Aditya V. Birla India Centre at
Marketing as Strategy draws on over 15 years’ personal experience in research, teaching, and consulting.

Kumar believes it is important for marketers to break from the traditional four Ps (product, price, promotion, place) and to adopt a more transformational, cross-functional approach in understanding the entire value chain. Marketing as Strategy is organized by chapters that correspond to each of seven organization-wide transformational initiatives. Kumar indicates that “all seven transformations may not apply to all firms, but at least one will apply to every firm” (p. 9). Kumar’s seven transformational initiatives are:

1. **From Market Segments to Strategic Segments:** Strategic segments can be found by using Kumar’s “Three Vs” framework: the valued customer (who to serve), the value proposition (what to offer), and the value network (how to deliver).

2. **From Selling Products to Providing Solutions:** Kumar highlights that companies facing commoditization have two main strategic options: they become either a low-cost provider, or a solutions provider. He proceeds to describe a process for taking a solutions approach to selling. This begins with a customer problem, proceeds through customer process mapping and educating customers about total cost, and finishes with the organization’s transformation for solutions selling.

3. **From Declining to Growing Distribution Channels:** The author reviews channel migration strategies and channel migration processes. The distribution strategy audit is particularly useful in determining both the quantitative and qualitative perspective of a company’s distribution network.

4. **From Branded Bulldozers to Global Distribution Partners:** Brands are having a difficult time managing the increasingly powerful and professionally managed retailers. Kumar investigates the organizational and cultural necessities for suppliers to transform from branded bulldozers to global distribution partners.

5. **From Brand Acquisitions to Brand Rationalization:** The book highlights brand rationalization as a critical path to higher profitability and growth. Kumar provides an excellent brand rationalization process, including a series of important questions to help a company determine if they have too many brands.

6. **From Market Driven to Market Driving:** Kumar indicates that one achieves radical business innovation through market driving. He characterizes market drivers as visionary, creating new markets and redefining categories, rather than focusing on obtaining market share in existing markets. This section describes the distinguishing features of “market-driving” companies compared to traditional “market-driven” companies. There follows an analysis of the various dimensions of marketing strategy and a description of a market-driving transformation process for established firms.

7. **From SBU Marketing to Corporate Marketing:** In many organizations, marketing has been assigned at the strategic business unit (SBU) level. Kumar indicates the strategic importance of marketing in the appointment of chief marketing officers (CMOs). The CMO can view the products, brands, channels, and customers as potential exploitable platforms across business units.

If some of these transformations intrigue you, I recommend this book to gain a fuller perspective. Kumar usefully illustrates his seven transformational initiatives for marketers with numerous examples, processes, charts, and matrices. He also provides valuable end-of-chapter checklists and key-point summaries. This is a thoroughly enjoyable and useful reference in a field of rapidly growing importance.

It is interesting to note that Simply Better and Marketing as Strategy are both published by Harvard Business School Press and that Barwise and Kumar are both professors at the London Business School. In addition, both books strongly propose transformations in marketing and taking more of a holistic view across the organization. The similarities between the two books stop there. The authors take very different approaches in transforming marketing. Simply Better emphasizes the importance of meeting fundamental category needs, while Marketing as Strategy advances to the next level of marketing best practices. If you are planning to transform, or are in the midst of transforming, your marketing department, I recommend that you read both books to gain differing perspectives.

**Reference**


Mary C. Drotar

Strategy 2 Market, Inc.