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Fifth Edition

NEW PRODUCTS MANAGEMENT

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New products have always been of interest to both academics and to practitioners, but organized, college-level instruction on the subject of new products management traces to the 1950s. But by the 1990s a new products management discipline has evolved. The Product Development and Management Association has flowered to over 2,000 members in some 30 countries around the world, over 300 colleges have courses on the subject of new products, and the field's journal, the *Journal of Product Innovation Management*, is now successfully into its 13th year of publication. The job of new products manager or director is becoming much more common and is offering much earlier entry than 10 years ago; we also see the emergence of higher level positions for careers to build to. The association has raised the issue of certification, is now very much an international operation, and has been able to do what many others have not—that is, merge the thinking and activity of professors and practitioners.

How This Book Views the Field of New Products Management.

Such exploding growth means that we still take a variety of approaches to the teaching of the new products subject—management, marketing science, technical, creative, design, and so on. This book provides the management approach, with a marketing slant. In every organization (industry, retailing, government, churches, etc.) there is a person or group of persons who, knowingly or unknowingly, are charged with getting new goods and services (both are products) onto the market. More and more today those people are new products managers or project managers or team leaders. They lead a truly multifunctional group of people, with the perspective of a general manager, operating as a company within a company. They must deal with the *total task*—strategy, organization, concept generation, evaluation, technical development, marketing, and so on. They are not finished with their work until the new product has achieved the goals assigned

to the team—this usually means some form of sales or profit, and it certainly means the task is not finished when the new product is put onto the shipping dock.

Consequently, we now try to avoid a common functional bias—it is rare today to hear that “R&D runs our new products activity” or that “marketing tells everyone what to do.” When a functional specialist takes over a new products team, that person must learn the general manager viewpoint, regardless where he or she reports in the firm.

Furthermore, this book calls on all of the contributing disciplines, stresses recent research findings, and strives for a level of sophistication equal to that of the best practitioners in this field. Instructors wishing to emphasize any of the specialty viewpoints within the general field of new products management will want to supplement the book with specialized material.

On the other hand, this book is not a research report on *typical* industry practice. It goes well beyond that and includes experimental work conducted by the more advanced practitioners and conceptual developments by academics.

Some Basic Beliefs That Guided the Writing

People who have used the first four editions of this book know my unique viewpoints on the subject. But for newcomers, and of course all students are newcomers, here are some of them.

1. Product innovation is one single operation in an organization. It has parts (strategy, teams, plans, etc.) but they are all just parts. Any operation that runs as separate pieces misses the strength of the whole.

2. The field is still new enough that it lacks a systematic language. This makes it very difficult for students, who are accustomed to studying subjects where a term means something, and only that something. I wish this were so in new products. What should we do—slip and slide around over the many terms and their variations? I believe we should not, and proposed a set of terms in the third edition of this book that seemed to fit and deserve consideration. The Glossary was accepted, so it has been expanded and strengthened in this edition. The terms are used consistently throughout the book, and I urge students to accept them. Some of the new terms proposed will survive, and others will die a quiet death, losing out to different and better terms that become widely accepted. The Glossary is found in Appendix E and I encourage use of it.

3. Ideas learned without application are only temporary residents in your mind. To become yours, a concept must be applied, in little ways or in big ones. Thus, the book is peppered with applications, short cases, and other opportunities for using the concepts studied. Projects are encouraged in the Instructor's Manual. There are even more examples from the business world, and up-to-date references on all important topics.

4. As much as I would like them, and have diligently tried to find them, I believe there are no standard sets of procedure for *makers of consumer*

packaged goods or of consumer durables, industrial goods, services, etc. There are no recipes.

Like a marketing plan and a production plan, there is a best plan for any particular situation. A manager must look at the situation and then compile a set of tools and other operations appropriate to that situation. All large firms use scores of different approaches, not one.

5. This leads to a favorite “ouch” of mine—the *halo* effect. The halo effect hurts the field of new products more than anything else—more than competition, more than government, more than tight budgets. The halo effect shows in the statement “It must be a good thing for us to do—3M does it, GE does it, or Hewlett-Packard does it.” Those are excellent companies, but one reason they’re good is they spend lots of time and money studying, learning from others. They have huge training programs in product innovation and bring in every expert who appears on the scene with what looks like a good new products management idea. They assume everything they do is wrong and can be improved. You should too. This book does. Citations of their actions are given as examples, not recommendations. These well-known firms have many divisions, and hundreds of new products under development at any one time. Managers there don’t even know what each other is doing, nor do they care, in the prescriptive sense. Each group aims to optimize its situation, so they look around, see what others in comparable situations are doing (inside and outside their firm), and pick and choose to fit them. To the extent there are generalizations (e.g., there should be some form of strategy), these will stand out as you work your way through the course. But what strategy to choose—and exactly how one should determine it—becomes situational.

6. An example of this lies in the next belief—should new products strategy rest on the base of technology or market? This choice has been argued for many years. But the argument is usually specious, moot. Most firms seek to optimize both, a sort of dual-drive strategy. Of course, true to the previous point, firms will build on one or the other if the situation seems to fit—for instance, DuPont’s platform program to find applications for the superstrength fabric Kevlar, or auto components firms who rely on OEM (original equipment manufacturer) engineering to spell out exactly what they want. And yet, DuPont works to advance that technology, and the components firms are evolving their own engineering operations!

So, the great variety in approaches used by businesspeople is not a testimony to ignorance, but to thinking. On a majority of the issues facing us today, intelligent people can come down with different views. Don’t misunderstand, one view is not necessarily better than the other, but it is made better by its defense, not by who said it or who used it.

Decisions are the same—they are not necessarily right or wrong at the time they are made. Instead, the manager who makes a decision has to *work hard to make that decision turn out right*. The quality of the work is more important than the quality of the decision. An example of this phenomenon is the sadness we feel when a manager says, “We’re looking for the really great idea.” Managers of product innovation *make* ideas great, they don’t *come* that way.

7. Lastly, I have tried to implement more clearly the view that *two* things are being developed—the product and the marketing plan. Two development processes are going on in tandem. Marketing strategy begins at the very start and runs alongside the technical work and beyond it. This means that the chapters on marketing have to first recap all that has happened before the time for actually writing out a marketing plan.

Changes in the Fifth Edition

This is an aside to teachers—past and potential adopters of *New Products Management*. First, much work on the fourth edition focused on the multifunctional process that has evolved so strongly in product innovation. We have always been multifunctional (marketing, finance, manufacturing, etc.), but now cooperation has turned into collaboration, committees into teams, and teams into small companies within big companies. You will find this multifunctional aspect appearing throughout the book, especially in “Technical Development” (Part IV). Allied with this has been an effort to tie topics horizontally—the product innovation charter is not covered in Chapter 4 and then forgotten—later chapters show how it used. The same for evaluation—the topic shows up first in Chapter 2 and concludes only after a successful launch in Chapter 22.

Second, since the first edition, there has been the issue of whether the material should be grouped by topic (e.g., ideation, evaluation, marketing) or by actual operating sequence in the firm. The fourth edition took up the operational view, and this fifth edition extends it. After concept generation comes Part III on “Pretechnical Evaluation,” followed by Part IV on “Technical Development.” Product use testing is now in Part IV, as a part of the technical development activity. That’s where business does it, and it learns best that way. Market testing now follows development of marketing plans, because that is where it occurs in real life. The organizational topics stay early in the technical development phase, where they were moved in the fourth edition. Financial analysis has moved up from Chapter 19 to Chapter 11, as requested by many users.

Another influence of cross-functionalization of the field has been a threat to functional courses. New products management is, more often than not, a marketing course. But the marketing people in business are finding themselves deeply involved in technical matters, in manufacturing process problems, in dealing with vendors, in arranging meetings between their engineers and customers, and many other such activities. Functional battles between technical, manufacturing, and marketing people are indefensible, whether on new products or on the established business.

This means that the book now considers nonmarketing views as they naturally come up. We don’t pigeonhole engineers to Chapter Y, or industrial designers to Chapter Z.

Third, special effort has been made to pull the pieces together because, after all, that is the way we run new product operations these days. Teams deal with *all* of the issues—manufacturing people help plan marketing strategy, and a

scientist will participate in process development. The A-T-A-R model precedes technical development.

Fourth, several new chapters have been added. A new Chapter 2 explains the key concepts driving product innovation today. These concepts (e.g., continuous stakeholder involvement, pretechnical product and marketing plan requirements, and a triple stream process) operate throughout the course, not just in one section of the book. Second, the product protocol has gained such industry support (deliverables, requirements, call it what you wish) that it required a separate chapter (Chapter 12). Third, to cover the full analytical process in marketing strategy, a third marketing chapter was required (Chapter 19). Some reductions came in eliminating the “Future” chapter and in consolidating the public policy discussion into one chapter.

Fifth, effort has continued (and intensified) to make the book relevant to its users. Since a text revision is actually a new product, I have tried to make it even more customer-oriented. The publisher invested twice as much money in the review process. Product examples, cases, and applications stress products that students buy and use.

New terms are included, as used in business, even though some of them will turn out to be buzz words—*fuzzy front end*, *continuous learning*, and *platforms*. One part of the “Future” chapter was retained in a new Appendix F—that was the set of 48 guidelines that can be used to appraise any organization’s new products program.

And, though not yet in cyberspace, where some future edition must certainly come forth, this edition introduces several interaction activities—where a challenge in a chapter has its answers at the end. Another user-driven change was to use bold font on all special terms as they first appear.

Sixth, the cases have been strengthened. Five are new, three were rewritten and lengthened, and several others received experience-based tweaking.

Seventh, the index was made much more detailed, and special effort has been made to consider the special needs of the business-to-business world, service developers, high-tech firms, designers, and those with a more global viewpoint. Such topics are interspersed at many points.

Eighth, there was a strong effort to improve graphics. Many list figures have been replaced, and there is a much stronger Power Point presence.

It was a major revision, and I sincerely hope it meets your needs. A new Instructor’s Manual, reflecting the changes in this edition, is available through the Irwin representative.

To the Practitioner

Because this book takes a managerial focus and is updated extensively, it is useful to the practicing new product manager. It has been used in many executive education programs. Great pains have been taken to present the “best practice” of industry and offer footnote references to business literature.

The Applications

From the first edition, the ends of chapters do not have a list of questions. Rather, I have culled from many conversations with students questions and comments they received from business managers on their fly-backs. These comments are all built into a conversation with the president of a conglomerate corporation. Explanation of how to use them is given at the end of Chapter 1.

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Many persons help write a book of this type, and it is impossible to thank them all. Great aid came from the staff of the Document Retrieval Department of the Michigan Business School Kresge Library.

From business, hundreds have helped—on field trips and during executive seminars. Scores of former students have given generously of their ideas, by telephone calls, campus visits, and the many things they have sent me. Academic colleagues continue making probably the greatest direct contribution, by reacting to previous editions. Thanks also to the especially thoughtful and constructive reviewers recruited by Richard D. Irwin:

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PART I

OVERVIEW AND PREPARATION

- 1 The Menu 2
- 2 Key Concepts 21
- 3 The New Products Process 40
- 4 Strategic Planning for New Products: The Product Innovation Charter 64

PART II

CONCEPT GENERATION

- 5 Concept Generation: Preparation and Alternatives 91
- 6 Concept Generation: Problem-Based Ideation 109
- 7 Analytical Attribute Approaches 127

PART III

PRETECHNICAL EVALUATION

- 8 The Concept Evaluation System 148
- 9 Charter and Prescreening 168
- 10 The Full Screen 188
- 11 Financial Analysis 203
- 12 Product Protocol 224

PART IV

TECHNICAL DEVELOPMENT

- 13** Development Structure 245
- 14** Development Team Management 261
- 15** Design and Special Managerial Needs 279
- 16** Product Use Testing 298

PART V

MARKETING

- 17** The Task of Strategic Launch Planning 322
- 18** Strategic Action Dimensions 339
- 19** Creative Implementation for the Strategic Plan 358
- 20** Market Testing: Pseudo Sale 378
- 21** Market Testing Continued: Controlled Sale and Full Sale 397
- 22** Launch Control 414
- 23** Public Policy Issues 433

Bibliography 453

Appendix A Sources of Ideas Already Generated 456

Appendix B Other Techniques of Concept Generation 460

Appendix C Small's Ideation Stimulator Checklist 466

Appendix D The Marketing Plan 469

Appendix E Glossary 474

Appendix F Guidelines for Evaluating a New Products Program 494

Index 499

PART I

OVERVIEW AND PREPARATION

1 The Menu 2

Why Is This an Important Field of Study?	3
How Does This Field Relate to Other Courses We Take?	5
Don't We Study about New Products in Other Courses, Too?	6
What Does This Mean to Us, as Students?	6
OK, So What Is a New Product?	8
Does This Book Cover Such Things as New Services, New Business Products, and New International Products?	10
On What Basic Ideas or Concepts Is This Field of Activity Built?	11
Don't Most Real Innovations Come from Small Firms and Inventors?	13
Is New Products Management an Art or a Science?	15
Can Innovation Really Be Taught?	16
Does This Field of Activity Have a Unique Vocabulary?	16
Does This Field of New Products Offer Careers?	17
Given All of This, What Will We Be Doing in This Book?	18
Does All of This Actually Work?	19
Summary	19
Applications	20

2 Key Concepts 21

Setting	21
Why and How Did These Key Concepts Come About?	21
Higher Level Strategy	22
The Organization Needs a Bundle of Specific Capabilities	25

Opportunity Identification and Mission Statement for It	25
Continuous Stakeholder Involvement	26
Active Corporate Support	29
Project Activity Managed by a Leader, Core Group, and Support:	
A Company within the Company	30
Commitment to a Unique, Superior Product	32
Triple Stream Process	32
Augmented Product Concept	34
A Pretechnical Product Definition	35
Marketing Requirements	36
The Launch Should Be Tracked through to Success	36
Continuous New Product Process Evolution	37
Summary	37
Applications	38

3 The New Products Process 40

Setting	40
“It Doesn’t Work That Way”	40
The Highlighter Saga	40
What Happened in That Saga	42
The New Products Process	43
Strategic Planning	45
Concept Generation	46
Pretechnical Evaluation	46
Technical Development	47
Commercialization	48
Launch	49
The Concept Life Cycle	49
Differences by Type and Level of Organization	51
The Requirements of a Good New Product Process	51
The Process Should Meet the Conditions of the 13 Key Concepts Given in Chapter 2	53
The Process Should Provide Some Structure of Checkpoints Along Its Way	55
The Process Should Allow the Team and Its Support Group Substantial Degrees of Freedom	57
The New Product Process Must Be Flexible to Changing Conditions	58
The New Product Process Must Deal with Especially Critical Points in the Development	59
The New Products Process Should Integrate the Team with the Rest of the Firm and the Rest of the World	59
The New Product Process Should Permit a Smooth Launch	60
The New Product Process Should Provide for Organizational Learning	60
Implications for Aspiring New Product Managers	60

Summary	61
Applications	61
Case: Nabisco SnackWell's	62

4 Strategic Planning for New Products: The Product Innovation Charter 64

Setting	64
Why Have Strategic Planning?	64
What Form Does a New Product Team's Strategy Take?	65
Some Inputs Come from Corporate Strategy	65
New Product Strategy Inputs from Special Analyses and Other Sources	69
Opportunity Identification	69
Management's Druthers	70
Noncorporate Strategic Planning	70
Miscellaneous Sources	72
A Closer Look at the PIC	72
Section 1 of the PIC: Background	73
Section 2 of the PIC: The Arena (Area of Focus)	73
Section 3 of the PIC: Goals and Objectives	76
Section 4 of the PIC: Special Guidelines	77
Finding the Right Opportunities for Focused Arenas	80
Evaluating Opportunities	80
Issues That Arise in the Process of Creating Charters	81
Summary	84
Applications	84
Case: Microsoft Windows	95 85

PART II

CONCEPT GENERATION

5 Concept Generation: Preparation and Alternatives 91

Setting	91
Preparation	91
The Product Innovation Charter	91
Finding the Right People	92
Management's Role in Making Creative People More Productive	93
Activities to Encourage Creativity	94
Special Rewards	96
The Removal of Roadblocks	96
The Concept	97
The Soft Bubble Gum Example	100
The Concept Statement	100
Two Basic Approaches	102

Gathering Concepts Already Created	103
Summary	106
Applications	106
Case: The Kids Wise Up	107

6 Concept Generation: Problem-Based Ideation 109

Setting	109
The Overall System of Internal Concept Generation	109
Gathering the Problems	111
Internal Records	111
Direct Inputs from Technical and Marketing Departments	112
Problem Analysis	112
The General Procedure	113
Methodologies to Use	115
Scenario Analysis	118
Solving the Problems	120
Group Creativity	121
Brainstorming	121
Disciplines Panel	122
Summary	124
Applications	124
Case: The American Health Care System	125

7 Analytical Attribute Approaches 127

Setting	127
What, and Why, Are Analytical Attribute Techniques?	127
Dimensional Analysis	129
Checklists	130
Gap Analysis	131
Determinant Gap Maps	132
AR Perceptual Gap Maps	133
OS Perceptual Gap Maps (with Similarities Data)	134
Comments on Gap Analysis	135
Trade-Off Analysis (Conjoint Measurement)	136
Coffee Example	136
Appliance Example	137
Service Example	138
Recent Modification	139
Relationships Analysis	139
About the Dimensions Used in Relationships Analysis	139
Two-Dimensional Matrix	140
Morphological or Multidimensional Matrix	140
Analogy	142
Summary	143

Applications	143
Case: Rubbermaid Inc.	144

PART III

PRETECHNICAL EVALUATION

8 The Concept Evaluation System 148

Setting	148
What's Going On in the New Products Process	148
Purposes of Evaluation	149
Balanced Product Innovation Portfolio	151
The Triple Streams Concept	152
The Cumulative Expenditures Curve	152
The Risk/Payoff Matrix	153
The Decay Curve	155
Planning the Evaluatyon System	156
Everything Is Tentative	156
Potholes	157
The People Dimension	158
Surrogates	158
The A-T-A-R Model	159
Where Do We Get the Figures for the A-T-A-R Model?	163
Regarding Sales Forecasting in General	164
Summary	165
Applications	165
Case: Concept Development Corporation	166

9 Charter and Prescreening 168

Setting	168
The Importance of Up-Front Evaluations	168
The Product Innovation Charter	169
Market Analysis	169
Initial Reaction	170
Concept Testing and Development	171
What Is a New Product Concept?	173
The Purposes of Concept Testing	174
Concept Testing Research Procedure	175
Prepare Concept Statement	177
Define the Respondent Group	181
Select Response Situation	181
Prepare the Interviewing Sequence	182
Conduct Trial Interviewing	183
Interview, Tabulate, Analyze	183

Variations	183
Conclusions	184
Summary	184
Applications	185
Case: Wolverine Car Wash	186

10 The Full Screen 188

Setting	188
Purposes of the Full Screen	188
Screening Alternatives	190
The Scoring Model	191
Introductory Concept	191
The Procedure	192
Profile Sheet	197
A Research-Based Model	198
Special Aspects	199
Summary	200
Applications	200
Case: Wilson Sporting Goods—Part I	201

11 Financial Analysis 203

Setting	203
The Real Problems of Financial Analysis	203
Recent Experiences	204
Summary of the Problems	205
Actions by Managers to Handle These Problems	207
Improve the New Product Process Currently in Use	207
Set the Forecast up as a Living Thing—Use the Life Cycle Concept of Financial Analysis	207
Reduce Dependence on Poor Forecasts	208
Sales Forecasting	213
Statistical Norms for Behavior from Causal Forces	214
Attitudes and Panels	214
Models Based on Past Products	215
Summary	216
Applications	216
Case: Bay City Electronics	217

12 Product Protocol 224

Setting	224
Review	224
Purposes of the Protocol	226
Protocol's Specific Contents	228