

1997

The emerging field of design planning integrates approaches from business strategy, social science research, and design prototyping. This bibliography addresses these areas, emphasizing approaches required for breakthrough strategies in times of change.

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This annotated bibliography on Design Planning is organized alphabetically by author under general areas of the design planning process. At the end of the publication is a listing of relevant articles in periodicals and Harvard Business Review.

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A-D

	behavioral research	business strategy	change management	complexity theory	corporate identity	cultural anthropology	design history	design management	design methodology	history of technology	innovation theory	marketing	organizational design	popular culture	systems theory	technology architectures / standards	
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Behavioral Research in Environmental Design	•								•								Michelson, William
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Built to Last: Successful Habits of Visionary Companies		•	•							•			•		•		Collins, James C.
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Complexity: The Emerging Science at the Edge of Order and...				•										•	•		Waldrop, Michael
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Design in the Information Environment: How Computing is...							•	•							•		Whitney, Patrick
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The Economy as an Evolving Complex System		•	•														Anderson, Philip
European Design Prize Winners! How Today's Successful...	•	•			•			•	•	•	•						Thackara, John
The Evolution of Everyday Things							•	•	•	•					•		Petroski, Henry
Flow: The Psychology of Optimal Experience	•																Csikszentmihalyi, Mihaly
How Buildings Learn				•			•	•								•	Brand, Stewart
In Search of Excellence: Lessons from America's Best-Run...		•									•	•	•				Peters, Tom
Increasing Returns and Path Dependence in the Economy...				•						•	•					•	Arthur, W. Brian
Industrial Design					•		•	•	•	•						•	Heskett, John
Industrial Design: Reflections of a Century					•		•	•	•	•						•	de Noblet, Jocelyn
Info Culture: The Smithsonian Book of Information Age...										•					•	•	Lubar, Steven
Innovation and Entrepreneurship		•	•								•	•					Drucker, Peter F.
Inquiry by Design: Tools for Environment-Behavior Research	•								•								Ziesel, John
Lightning Strategies for Innovation: How the World's Best...	•	•						•	•	•	•	•					Zangwill, Willard
The Look of the Century							•		•							•	Tambini, Michael
Managing on the Edge		•	•								•	•					Pascale, Richard T.
The Marketing Imagination											•	•	•				Leavitt, Theodore
Marks of Excellence: The History and Taxonomy of Trademarks					•		•	•			•	•					Mollerup, Per
Material World: A Global Family Portrait	•					•										•	Menzel, Peter
The New Business of Design		•	•				•	•		•	•						IDCA
New Product Success Stories: Lessons from Leading Innovators									•	•	•						Thomas, Robert J.
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O-S

	behavioral research	business strategy	change management	complexity theory	corporate identity	cultural anthropology	design history	design management	design methodology	history of technology	innovation theory	marketing	organizational design	popular culture	systems theory	technology architectures / standards	
The One to One Future: Building Relationship One Customer...											•	•					Peppers, Don
Organizational Architecture: Designs for Changing Organizations	•	•									•		•				Nadler, David A.
Out of Control				•						•				•	•	•	Kelly, Kevin
Participatory Design: Principles and Practices	•							•	•								Schuler, Douglas
A Pattern Language							•	•								•	Alexander, Christopher
Plans and Situated Actions: The Problem of Human Machine...	•								•								Suchman, Lucy
The Practice of Everyday Life						•										•	De Certeau, Michel
Product Design and Corporate Strategy: Managing the...					•		•			•	•	•					Blaich, Robert
Product Juggernauts: How Companies Mobilize to...		•						•		•	•	•			•		Deschamps, Jean-Philippe
The Psychology of Everyday Things	•								•								Norman, Donald A.
Redefining Design: From Form to Experience	•						•	•	•						•	•	Mitchell, C. Thomas
Relationship Marketing: Successful Strategies for the Age...													•				McKenna, Regis
Rethinking the Future		•	•				•			•	•	•					Gibson, Rowan
The Rise and Fall of Strategic Planning		•											•				Mintzberg, Henry
A Science of Generic Design: Managing Complexity Through...							•	•								•	Warfield, John N.
The Sciences of the Artificial (2nd edition)							•	•								•	Simon, Herbert A.
Seeing Differently: Insights on Innovations	•	•	•				•			•	•	•				•	
Set Phasers on Stun and Other Tales of Design, Technology...							•			•						•	Casey, Steven
Shared Minds: The New Technologies of Collaboration							•	•	•				•				Schrage, Michael
Simple Rules for a Complex World			•										•	•			Epstein, Richard
The Social Life of Things: Commodities in Cultural Perspective	•					•										•	Appdurai, Mrjun

S-Y

	behavioral research	business strategy	change management	complexity theory	corporate identity	cultural anthropology	design history	design management	design methodology	history of technology	innovation theory	marketing	organizational design	popular culture	systems theory	technology architectures / standards	
The Social Shaping of Technology: How the Refrigerator Got...							•			•					•	•	MacKenzie, Donald
The Sources of Innovation	•								•		•	•	•				Von Hippel, Erik
Strategies for World Class Products					•			•			•	•					Farish, Mike
Structures of Everyday Life: Limits of the Possible...						•				•				•	•		Braudel, Fernand
Successful Product Design								•	•				•	•	•		Hollins, Bill
Usability in Practice: How Companies Develop User-Friendly...	•							•	•							•	Wiklund, Michael E.
Usability: Turning Technologies into Tools	•							•	•								Adler, Paul S.
User-Centered Systems Design	•								•							•	Norman, D.A.
Value Migration: How to Think Several Moves Ahead of...		•	•								•						Slywotzky, Adrian J.
The Virtual Community: Homesteading on the Electronic...							•			•					•		Rheingold, Howard
The Visual Display of Quantitative Information								•	•							•	Tufte, Edward R.
Wellsprings of Knowledge: Building and Sustaining the...	•	•						•	•	•			•				Leonard-Barton, Dorothy
The Whale and the Reactor: A Search for Limits in an Age of...							•			•						•	Winner, Langdon
Why Things Bite Back: Technology and the Revenge of...										•						•	Tenner, Edward
Winning by Design: Technology, Product Design and...					•			•			•	•	•				Walsh, Vivien
The Wisdom of Teams: Creating the High Performance...			•					•			•		•				Katzenbach, Jon R.
The Witch Doctors: Making Sense of Management Gurus	•	•														•	Micklethwait, John
World Design: Nationalism and Globalism in Design					•		•	•	•							•	Aldersley-Williams, Hugh
Yesterday's Tomorrows							•			•						•	Corn, Joseph J.

Jean-Philippe Deschamps and P. Ranganath Nayek, **Product Juggernauts: How Companies Mobilize to Generate a Stream of Market Winners**

Boston, MA: Harvard Business School Press, 1995

A wide and varied collection of case studies from two Arthur D. Little consultants outlining more systemic ways to reliably create successful new products – most revolving around new types of parallel development processes. Even with all the methods and processes outlined, they admit true breakthroughs are part art, part science.

Charles H. Ferguson and Charles B. Morris, **Computer Wars; The Fall of IBM and the Future of Global Technology**

New York: Times Books, 1994

Despite the recent resurgence of IBM, this book outlines some prescient approaches to finding and fostering technology “architectures” that have long-lasting value. Ferguson should know, having sold his subsequent company, Vermeer, to Microsoft for a tidy \$120m.

Gary Hamel and C. K. Prahalad, **Competing for the Future: Breakthrough Strategies for Seizing Control of Your Industry and Creating the Markets for Tomorrow**

Boston, MA: Harvard Business School Press, 1994

One of the most influential books on strategic planning in the last ten years, Prahalad and Hamel outline the need for more ambitious strategies in a time of increased change and competition. As the most design-friendly strategy book around, it outlines a more proactive approach to planning where you “imagine the future” and invent your way into it.

Henry Mintzberg, **The Rise and Fall of Strategic Planning**

New York: The Free Press, 1994

A dense but thought provoking review of the state of strategic planning. Mintzberg highlights the difference between traditional numerical

planning skills required in the analysis of strategies and new types of synthetic skill required in the shaping of emergent strategies and catalyzing an organization to take charge.

Wally Olins, **Corporate Identity: Making Business Strategy Visible through Design**

Boston, MA: Harvard Business School Press, 1989

A good introduction to corporate identity that highlights one of the key issues many designers face: do great identities explain what a company is historically known for? Or do they explain what they should be creating in the future and thus, be more aspirational and strategic in nature? Recent introductions like the British Airways identity suggest the latter as a far better approach, not fully explored in this book.

Charles L. Owen, **Design for Integrity**

Chicago, IL: Institute of Design Communication Center, 1993

One of the world's leading design methods innovators summarizes the need for – and some practical applications of – more systemic approaches to design. As the most important and interesting problems continue to become more complex and far outweigh traditional methods of development, this is becoming an increasingly important issue for all forms of planning and design.

Michael Rothschild, **Bionomics: Economy as Ecosystem**

New York: John Macrae, 1992

This lengthy tome was one of the first to define and promote the connection between ecological theory and emerging economic behavior in new types of market and – they hope – a massively deregulated, freer government. Rothschild practices what he preaches as head of the Bionomics Institute, an organization with planned obsolescence.

Peter Schwartz, **The Art of the Long View: Planning for the Future in an Uncertain World**

New York: Currency Doubleday, 1991

A classic that outlines scenario-based planning as pioneered by Royal Dutch Shell in the early 70's and currently practiced by the eclectic Global Business Network, co-founded by Schwartz. It points out that it is impossible to predict the future, hence it is better to be ready for multiple alternatives. A long view, but a short and quick read.

John Thackara, ed., **European Design Prize Winners! How Today's Successful Companies Innovate by Design**

Amsterdam, Holland: BIS Uitgeverij, 1997

Design prizes are typically a terrible way of picking widespread innovations, but the Netherlands Design Institute does a thorough and readable job of placing recent, small scale design successes in cultural and technical contexts, highlighting some of the main issues and theories shaping the field of design today.

John Ziesel, **Inquiry by Design: Tools for Environment-Behavior Research**

New York: Cambridge University Press, 1984

A comprehensive, accessible, and practical introduction on how to set up and interpret design research. It lacks only for ways to draw larger, more strategic implications from research. Also contains a useful bibliography on other design and environmental research books.

H. I. Ansoff, **Corporate Strategy**

New York: McGraw-Hill, 1965

Considered another seminal work, Ansoff has aged less well but is useful historical background from one of the original books on strategic planning.

James C. Collins and Jerry I. Porras, **Built to Last: Successful Habits of Visionary Companies**

New York: Harper Business, 1994

Based on extensive research done at Stanford, this book surprisingly highlights that leaders are not one of the variables of long-standing companies, rather persistence, cult-like behavior and “big hairy audacious goals” are. An interesting read to find out why some companies continue to stand out from the pack – although they remind us that those companies weren't always that way.

Rowan Gibson, ed., **Rethinking the Future**

Sonoma, CA: Nicholas Brealey Publishing, 1997

A grandiose title, this book captures the views of a gaggle of gurus. A collection of summarized articles are followed by interviews with the authors ranging from Porter and Kotter to Hamel and Covey. A good pointer to more substantive work beyond, but lacking much of that detail here, it suffers most by offering few connections between the work. Certainly cheaper than the six figure sums many of these gurus now charge per day.

John Micklethwait and Adrian Wooldridge, **The Witch Doctors: Making Sense of Management Gurus**

New York: Times Books, Random House, 1996

Important parallel reading to *Rethinking the Future*, two Economist contributors wrote this book to highlight some the quirks and shortfalls of aimlessly following the latest business trends and buzzwords. Important reading for any management consultant or planner who wants to have longer-term impact, but the book doesn't go far enough in offering possible solutions.

James F. Moore, **Death of Competition: Leadership and Strategy in the Age of Business Ecosystems**

New York: Harper Business, 1996

As a wild comparison to Porter, Moore takes you on a tour of the planning jungle, exploring the latest buzzphrase to infiltrate management theory: ecological and biological theory. Metaphors aside, Moore presents some progressive and provoking ways to approach new products, services, and markets.

Tom Peters and Robert Waterman, Jr., **In Search of Excellence: Lessons from America's Best-Run Companies**

New York: Warner Books, 1983

Excellent companies... not! While many of the companies outlined have faltered since the book was originally published, this book remains the most insightful Peters has written. His many more recent works have bridged the different aspects of design, but tend to be vastly more superficial and whimsical.

Michael E. Porter, **Competitive Strategy: Techniques for Analyzing Industries and Competitors**

New York: Free Press, 1980

**Competitive Advantage: Creating and Sustaining Superior Performance**

New York: Free Press, 1985

Remaining two of the “seminal” works on strategy, Porter effectively outlines the Harvard Business School approach to planning. These books are by modern standards overly deterministic and “static” approaches to planning that do far more to place you in today's markets than help you create new markets of tomorrow, but are far cheaper than paying for a full Harvard MBA – and maybe better value too.

Adrian J. Slywotzky, **Value Migration: How to Think Several Moves Ahead of the Competition**

Boston, MA: Harvard Business School Press, 1996

With traditional markets and channels breaking down, Slywotzky starts to outline new ways of thinking about value that go way beyond traditional value chain analyses. The case studies and analyses are a stimulating starter on the way to somewhere interesting in the creation of new types of business models.

Michael Treacy, Fred Wiersema, **The Discipline of Market Leaders: Choose Your Customers, Narrow Your Focus, Dominate Your Market**

Reading, MA: Addison Wesley, 1995

Treacy and Wiersema took some of their own advice too much to heart by buying truckloads of their book and loading the best-seller list. Nevertheless, there are some core insights in the book about different ways to focus a company that remain useful.

## ORGANIZING INNOVATION

Peter F. Drucker, **Innovation and Entrepreneurship**

New York: Harper Business, 1985

The yoda of management gurus, Drucker talks about how to foster innovation in large and emerging companies. His list of four basic entrepreneurial strategies is even more relevant today, highlighting the need to frame seemingly normal problems in new ways to stretch to greater innovation.

Dorothy Leonard-Barton, **Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation**

Boston, MA: Harvard Business School Press, 1995

Proposing that experimentation and learning builds future success, Dorothy Leonard-Barton highlights different methods to foster better information and knowledge transfer in the creation of new products. Noted for her work on "empathic design," this book introduces the approach as a way to observe and design around user adaptations of new products.

P. Ranganath Nayak and John M. Kettingham, **Breakthroughs: How Leadership and Drive Create Commercial Innovations that Sweep the World**

San Diego, CA: Pfeiffer and Company, 1994

A couple of Arthur D. Little consultants outline some of the more purposeful and systemic methods to create breakthrough products and services. Ultimately, even they admit that in an unpredictable world breakthroughs still require trial and enlightened observation, as it rarely happens right the first time — or in the same way each time.

Robert J. Thomas, **New Product Success Stories: Lessons from Leading Innovators**

New York: John Wiley and Sons, 1994

A wonderful if sometimes superficial collection of case studies that prove how different — and seemingly random — the evolution of successful products are. Few robust guidelines highlight any of the deep organizational structures and methods used to foster them, but the book is a good starting place to understand the challenges of new product development.

Various, introduction by John Seely Brown **Seeing Differently: Insights on Innovation**

Boston, MA: Harvard Business School Press, 1997

If you don't want to pay the hefty subscription to the *Harvard Business Review*, this book is the next best thing. This useful compendium brings together some of the most thought provoking and important articles recently published in the journal that outline innovative approaches to business, technology, and economics.

Erik Von Hippel, **The Sources of Innovation**

New York: Oxford University Press, 1988

Von Hippel outlines the "distributed innovation process" and points out the seemingly obvious fact that innovation occurs at the point of greatest benefit — often the end or "lead users" rather than the engineers or marketers who dreamt up the technology or service in the first place. A slightly technical book, it should offer guidance to planners about the origins of new ideas.

Willard Zangwill, **Lightning Strategies for Innovation: How the World's Best Firms Create New Products**

New York: Lexington Books, 1993

Highlighting that the most innovative companies win in times of dramatic change and competition, Zangwill makes a compelling case that you can never know enough about customer behavior in these circumstances, so rapid learning and flexibility should be preferred over predetermined success. He goes on to highlight both more and less traditional ways to foster that culture within an organization.

## INTEGRATING DESIGN AND BUSINESS

Robert and Janet Blaich, **Product Design and Corporate Strategy: Managing the Connection for Competitive Advantage**

New York: McGraw-Hill, 1993

Written by the person who introduced modern design management into Philips, this book details approaches there and in Herman Miller to link design processes with the rest of the organization, and outlines general principles applicable elsewhere. While both main examples remain design-friendly organizations, Philips has fared less well recently as often superficially-applied design has done little to help the company substantively.

Mike Farish, **Strategies for World Class Products**

Brookfield, VT: Gower Publishing, 1995

More organizational than Rassam, this book seems to cover much of the same ground but is very technically and engineering oriented, lacking any insight about users and where new products come from, or more worryingly, about different ways to tailor them for different cultures around the world. Useful context and background nonetheless.

International Design Conference in Aspen, **The New Business of Design**

New York: Allworth Press, 1996

From the annual and aging international design conference in Aspen, this book carries transcripts from an eclectic collection of design-related speakers including John Kao of Harvard Business School, Disney Imagineer Bran Ferrin, and Tom Peters, although his freneticism doesn't carry over which is a pity as he is far more engaging on stage than on paper.

Christopher Lorenz, **The Design Dimension: Product Strategy and the Challenge of Global Marketing**

New York: Basil Blackwell, 1986

One of the classics of design strategy, Lorenz introduces some of the ways design can work with marketing, but as a result this book lacks any real depth in how to truly understand users and break out of the pack. Useful reading to understand the way most people still think about design strategy.

Clement Mok, **Designing Business**

San Jose, CA: Adobe Press, 1996

A meticulously designed book from one of the most successful information designers turned entrepreneurs today (Mok is the creative director of NetObjects, a company he cofounded). While it gives a comprehensive view of the evolving role of information design in the electronic and online world, it lacks the coverage of other fields of design often required in truly integrated business strategies.

Clive Rassam, **Design and Corporate Success**

Brookfield, VT: Gower Publishing, 1995

Primarily covering product design and its role in successful companies (and countries) this book is short and to the point. It introduces what design is, what it does and how to use it without going into any real depth or detail. Part of a British Design Council collection of books, most of the examples are British and European.

Vivien Walsh and Robin Roy, Margaret Bruce, Stephen Potter, **Winning by Design: Technology, Product Design and International Competitiveness**

Cambridge, MA: Blackwell Business, 1992

Being both British and academic, this book is comprehensive and thoughtful, but ultimately a dull plea for the power of design in successful companies and economies, supported by a multitude of charts and numbers.

## UNDERSTANDING AND ADDRESSING USER NEEDS

Paul S. Adler and Terry A. Winograd, **Usability: Turning Technologies into Tools**

New York: Oxford University Press, 1992

With complex systems increasingly causing real danger to people, this sometimes dense collection of case studies details ways that design theorists and practitioners approach making products usable, including a Xerox case that builds on Suchman's work.

Mrjun Appdurai, **The Social Life of Things: Commodities in Cultural Perspective**

New York: Cambridge University Press, 1986

This edited volume brings together a collection of case studies from different cultural and social contexts. By tracking the lifecycle of commodity products, the authors each attempt to understand how value, taste and desire are constructed — and what differentiates a piece of junk from a valued antique.

Mihaly Csikszentmihalyi, **Flow: The Psychology of Optimal Experience**

New York: Harper Collins, 1991

Important for the ways it can be applied to creating meaningful customer experiences, Csikszentmihalyi's most accessible book introduces the idea of flow: that optimal experiences happen somewhere between those that fail to stimulate challenge and those that are simply too much of a stretch to seem possible. Put another way, anything worthwhile in life is worth working for. (Pronounced Chick-sent-me-hi, if you're wondering.)

Michel De Certeau, **The Practice of Everyday Life**

Berkeley, CA: University of California Press, 1988

An academic and theoretical examination of the ways in which users "really" operate. De Certeau challenges the notion that users are really passive consumers and attempts to outline models of action based around evolving, interpretive behaviors: everyday life invents itself by poaching in countless ways on the property of others.

Theodore Levitt, **The Marketing Imagination**

New York: Free Press, 1983

From one of the grand pooh-bahs of marketing and a Harvard professor to boot, Levitt basically asks for a balance between innovation and imitation. Designers tend to love the former, marketers flock to the latter, so both should end up happy. Unfortunately, few designers or marketers understand this balance, and fewer people still recognize the increased need for innovation when markets are as ill-defined as they have become since Levitt wrote this book. Includes the classic *Harvard Business Review* article "Marketing Myopia".

Regis McKenna, **Relationship Marketing: Successful Strategies for the Age of the Consumer**

New York: Addison-Wesley, 1991

The marketing guru who helped nurture the Apple Macintosh, Regis McKenna has spent much of his life applying tired and tested marketing techniques to entirely new markets. While the irony of this seems lost in most books, at least in the area of individual marketing McKenna appears here ahead of his time, but Pepper and Rogers seem to have stolen much of his wind with a more focused approach.

Peter Menzel and Charles C. Mann, **Material World: A Global Family Portrait**

San Francisco, CA: Sierra Club Books, 1994

An extensively researched and fantastically photographed book that literally turns statistically average family homes from around the world onto the street and shows just how much junk the American family has. Read this if you ever have a sense that families around the world might be alike.

William Michelson, ed.,

**Behavioral Research in Environmental Design**

Stroudsburg, PA: Hutchison and Ross, 1975

One of the early works explaining how to understand how people behave in physical spaces and the implications it has on initial and ongoing environmental and interior designs especially. A good comparison to Goffman's "Behavior in Public Places."

Geoffrey Moore, **Crossing the Chasm**  
New York: Harper Business, 1995  
**Into the Tornado**

New York: Harper Collins, 1995  
These books explode the traditional technology adoption model to propose that a huge gap exists between the niche technology users of the early market and the initial users of the later, mass market. Moore outlines ways to cross this gap in the first book and details the tornado of that transformation in the second. Generally useful reading from the heart of Silicon Valley that should lead to focused initial uses for any planned technology and far more widely applicable uses later.

Robert Francis Murphy, **The Dialectics of Social Life: Alarms and Excursions in Anthropological Theory**  
New York: Basic Books, 1971  
An irreverent, fun to read book that criticizes the tendency of anthropological and other social science theories to model and organize the fluidity of social life into rigidly bounded categories. One of the few academic texts that uses the "F" word.

Donald A. Norman, **The Psychology of Everyday Things**  
New York: Basic Books, 1988

**Things That Make Us Smart: Defending Human Attributes in the Age of the Machine**  
Reading, MA: Addison-Wesley, 1993  
A plea for a common sense approaches to the design of everyday items, these two books set respective challenges for developers to make things first simple and clear, then allow people to modify open systems themselves. Judging by the growing weight of user manuals the world over, most engineers still haven't read these books.

Don Peppers and Martha Rogers, PhD, **The One to One Future: Building Relationships One Customer at a Time**

New York: Currency Doubleday, 1993  
**Enterprise One to One: Tools for Competing in the Information Age**  
New York: Currency Doubleday, 1997  
With the onset of extensive information technology, Peppers and Rogers highlight the need for successful new products and services to be tailored to individual users. While the implications of the approach raise many privacy issues and careless application of the technology too often leads to automation and voicemail hell, many of the examples in these books show the power of intelligently and thoughtfully applied information systems.

Douglas Schuler and Aki Namioka, **Participatory Design: Principles and Practices**  
Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers, 1993  
Drawing on extensive examples and foundations of the work in Scandinavia, this collection of case studies shows the value of "co-constructed" innovations in the development of complex systems. The general principle is applicable everywhere: that often the best ideas come from the ways people adapt systems in use.

Lucy Suchman, **Plans and Situated Actions: The Problem of Human Machine Communication**  
Cambridge, England: Cambridge University Press, 1985  
From one of the pioneers in the use of behavioral observation from Xerox PARC, this book is based on early work with photocopiers and argues that products are tools that shouldn't provide idiotproof and rigid solutions, but should allow for constantly reformulated possibilities.

Michael E. Wiklund, ed., **Usability in Practice: How Companies Develop User-Friendly Products**  
Cambridge, MA: AP Professional, 1994  
Another collection of case studies about usability, this book focuses primarily on computer systems and a cognitive psychology approach to "debugging" them.

Fernand Braudel, **Structures of Everyday Life: The Limits of the Possible (Civilization and Capitalism: 15th to the 18th Century)**

Berkeley, CA: University of California Press, 1992  
Certainly not lacking for ambition, in the first of a three-part volume of truly global histories, Braudel integrates history, cultural anthropology and contemporary archeological work to detail how interrelated the world is. The notion that the world is a global system is shown to be a matter of degree.

Steven Casey, **Set Phasers on Stun and Other Tales of Design, Technology and Human Error**

Santa Barbara, CA: Aegean Publishing, 1993  
A collection of case studies that read like the typical disaster movie script, with multiple innocuous actions cascading into widespread catastrophe. Casey highlights how bad design can embed human error deep in complex systems. A good complement to Norman, this is what happens if you truly screw up.

Joseph J. Corn and Brian Horrigan, **Yesterday's Tomorrows**

Baltimore, MD: The John Hopkins University Press, 1996  
Referring to the assumption that nothing is truly new, the authors outline that created futures tell you more about present beliefs and assumptions than they do about what will happen next. Taken another way however, with the right methods, it should be possible to research patterns of everyday life today to understand what is most likely to widely proliferate in the future. As Yogi Berra might say, prediction is hard, especially when it is about the future.

Steven Lubar, **Info Culture: The Smithsonian Book of Information Age Inventions**

New York: Houghton Mifflin, 1993  
This comprehensive historical textbook details many of today's important inventions and their social consequences from deep in the industrial age to current day, illustrating the multitude of iterations before taking root in a culture.

Donald MacKenzie and Judy Wajcman, **The Social Shaping of Technology: How the Refrigerator got its Hum**

Milton Keynes, England: Open University Press, 1995  
A fascinating but hard to find book that describes some of the strange origins of otherwise taken-for-granted aspects of new technology. It illustrates the need for strange social "hooks" to get new technologies to take root in the culture.

Henry Petroski, **The Evolution of Everyday Things**

New York: Vintage Books, 1992  
Author of other books on the role of failure in engineering design, Petroski details some of the early iterations and dead-ends in the evolution of some of the common, seemingly dull items that most people take for granted. The book offers insight into the long time it takes for "winners" to take final shape.

Howard Rheingold, **The Virtual Community: Homesteading on the Electronic Frontier**

New York: Harper Perennial, 1994  
A quick read through the early life of online systems, Rheingold's book is important for the widely applicable insight that people naturally group around areas of interest. With increasing influence online and elsewhere, these "communities of interest" are rapidly achieving powerful social and commercial impact – and offering new ways to research and support different customer groups. Understanding that a new set of rules governs this behavior, Rheingold goes as far as posting his book for free download on the web.

Edward Tenner, **Why Things Bite Back: Technology and the Revenge of Unintended Consequences**

New York: Alfred Knopf, 1996  
As technology is applied in more and more places, it makes peoples' lives easier but also makes them more complacent. Tenner uses an intriguing collection of case studies to point out that technology doesn't make problems go

away, it merely shifts them somewhere else. Current design systems often fail to account for this in advance. The book ultimately reinforces that the more we shape technology, the more technology shapes us.

Langdon Winner, **The Whale and the Reactor: A Search for Limits in an Age of High-Technology**

Chicago, IL: University of Chicago Press, 1986  
Winner outlines some of the societal and political consequences of technology development that emerge from enduring but largely unintended consequences of design decisions, among a collection of essays. Winner is one of the founding members of the Science and Technology Studies program at Rensselaer Polytechnic Institute.

Hugh Aldersley-Williams, **World Design: Nationalism and Globalism in Design**  
New York: Rizzoli, 1992

Defining global design as diverse, distinct national types over universal style (American), this book catalogs many of the major manufacturers and designers around the world without addressing ways that designers can more deeply understand the people who use products and the many cultural differences that exist around the world.

Peter Dormer, **Design Since 1945**

New York: Thames and Hudson, 1993  
In the split between design as science and design as art, this book clearly falls closer to the latter, but presents a readable introduction to many fields of design. It is helpful as general background to the field, but is dated in the prediction of the future of design being ecologically driven.

John Heskett, **Industrial Design**

New York: Thames and Hudson, 1991  
As a thoughtful detailed history of the emergence and evolution of industrial design as a field from the early industrial revolution to more recent times, Heskett offers useful background about one of the closely related fields predating design planning.

Jocelyn de Noblet, ed.,

**Industrial Design: Reflections of a Century**

Paris, France: Flammarion/APCI, 1993  
From an exhibition of the same name in Paris in 1993, this extensive collaborative work details the history and evolution of the industrial design field over the course of a century. Beautifully illustrated, it manages to balance images with thoughtful commentary to help people understand the place of design in culture over the years. Like many things French, this book is strong on design as flair and flamboyance, far weaker on design as a strategic or systemic approach.

Michael Tambini, **The Look of the Century**

New York: Dorling Kindersley, 1997  
An excellent visual dictionary of major cultural artifacts, this is a fantastic resource but ultimately a very light read. Like many other Dorling Kindersley books, this is an immaculately constructed visual exploration of designed objects over the years.

## SYSTEMATIZING CHANGE

### Christopher Alexander, **Notes on the Synthesis of Form**

Cambridge, MA: Harvard University Press, 1964

A classic in the design field that discusses the deep interrelationship between the way a problem is framed and the process and solution to that problem. An architect by training, Alexander is widely noted for his work in formalizing the underlying, repeatable systems and patterns that support most design processes and highlighting the need for more rigorous methods to address complex problems.

### Christopher Alexander, Sara Ishikawa, and Murray Silverstein, **A Pattern Language**

Oxford University: Oxford University Press, 1977

A dense work that lays the foundation for many rule-based design processes and systems, like Seaside in Florida. While the book is focused on the physical systems and forms that arise, the underlying principles are equally relevant and applicable to many types of organizational and electronic system design.

### Stewart Brand, **How Buildings Learn**

New York: Viking, 1994

Understanding that nothing is ever designed as a static solution, this book meticulously details the rich patina of use that grows after a building is designed and built. One of the co-founders of the Well and the Global Business Network, Brand highlights some of the deficiencies in modern architecture and goes to show that in many cases, usage is design, which can be better supported through "open" design systems. And the home improvement market looks set to grow further.

### Bill Hollins and Stuart Pugh, **Successful Product Design**

London, England: Butterworths, 1990

An engineering and manufacturing-driven design book, it nonetheless offers insights in one approach towards a more rigorous, systemic approach to designing new products. Pugh is one of the pioneers in formalizing parts of the design process including the "product design specification."

### C. Thomas Mitchell, **Redefining Design: From Form to Experience**

New York: Von Nostrand Rheinhold, 1993

The core insight is captured clearly in the title: user needs are central to emergent types of design when creating a compelling experience as opposed to the next whizzy gadget. Mitchell outlines an interesting collection of "experience designers" from Brian Eno to Christo, exploding the notion of design wide open.

### D.A. Norman and S.W. Draper, eds., **User-centered Systems Design**

Hillsdale, NJ: Lawrence Erlbaum Associates, 1986

Somewhat before its time, this book outlines approaches and generalizable design principles derived from hardware and software computer systems design, albeit in a jargony way, which seems somewhat ironic given its title.

### Herbert A. Simon, **The Sciences of the Artificial, 2nd Ed.**

Cambridge, MA: MIT Press, 1981

A work that seems to be more relevant today than ever, this important work makes a good complement to Alexander's work. Introducing the idea that the complexity of individual actions is representative of the deep underlying complexity of larger organizations, Simon offers thoughts to why people subsequently take the first, easiest choice, rather than the rationalized best choice.

### John N. Warfield, **A Science of Generic Design: Managing Complexity Through Systems Design**

Ames, IA: Iowa State University Press, 1990

A dense and sometimes undecipherable book, its core insight is that a general systems theory is required for designing increasingly complex systems. This could have been outlined in far fewer words; it's a pity that the approach described seems lacking in practical outcomes.

## ALTERNATIVE BUSINESS MODELS

### Philip Anderson, Kenneth J. Arrow, and David Pines, eds., **The Economy as an Evolving Complex System**

New York: Addison-Wesley, 1988

A collection of early case studies on the application of complexity theory to economics. It highlights some of the deep flaws in traditional deterministic and empirical economic modeling that point to the need for new ways to model emergent economic behavior and new types of business model.

### W. Brian Arthur, **Increasing Returns and Path Dependence in the Economy (Economics, Cognition and Society)**

MI: University of Michigan Press, 1994

Recently popularized in the success of Intel, Microsoft, and a few other lucky (and well run) companies, Arthur details some of the underlying theory of path dependence: the behaviors that occur when QWERTY, Windows, and other dominant standards take hold. He unfortunately does little to explain why seemingly inferior solutions win or how you can create the next winner — at least he hasn't told us about it yet. Most of the book is highly theoretical, but the first chapter at least should be widely accessible.

### Richard Epstein, **Simple Rules for a Complex World**

Cambridge, MA: Harvard University Press, 1995

Making a strong case for deregulation and open systems, Epstein illustrates the underlying belief that it is far more effective to create a few basic rules to guide intelligent people than to try to micromanage their preferred behavior. Alluding to a general distrust of large institutions, Epstein bravely puts his theory to test in six general rules that he persuasively claims could make much of government and the legal profession irrelevant. Who could argue?

### Kevin Kelly, **Out of Control**

New York: Addison Wesley, 1994

Exploring the role "neobiological" systems and principles through a fascinating collection of stories, this highly acclaimed book from the executive director of *Wired* highlights the rich applicability of emergent behaviors and

strategies. The flocking or "hivemind" behaviors described in the book seem to have induced similar behaviors in response, with a massive number of books, conferences and articles following Kelly's lead.

### Michael Waldrop, **Complexity: The Emerging Science at the Edge of Order and Chaos**

New York: Simon and Schuster, 1992

This book details some of the background of the Sante Fe Institute, one of the pioneers of the emerging field of complexity theory and its application to other areas. Of special note is the connection to emerging economic theory, through the work of Brian Arthur. While not the "theory of everything" it was hailed to be in the late 80's, complexity theory has widespread implications for a large number of areas today, including decentralized strategy and IT support systems.

## COMMUNICATING CHANGE AND COMPLEXITY

### Per Mollerup, **Marks of Excellence: The History and Taxonomy of Trademarks**

London, England: Phaidon Press, 1997

A catalog of graphical detail, this heavy tome presents a comprehensive study of the evolution and use of trademarks by modern corporations. Beautifully researched and designed, it does little to offer insight into the new types of methods and possibilities that are now emerging in more vibrant, dynamic identities.

### Edward R. Tufte, **The Visual Display of Quantitative Information**

Cheshire, CT: Graphics Press, 1983

### Envisioning Information

Cheshire, CT: Graphics Press, 1990

### Visual Explanations: Images and Quantities, Evidence and Narrative

Cheshire, CT: Graphics Press, 1997

Recognizing the importance of clear and understandable information design, this series of books explores in fascinating detail the best use of information design in different dimensions, respectively: numbers; numbers and space; and numbers, space and time. While few directly actionable guidelines are made explicit, Tufte clearly practices what he preaches, self-publishing and part-designing the books to perfection as he couldn't find anyone else up to the job. There are pop-ups, too.

### Patrick Whitney and Cheryl Kent, eds., **Design in the Information Environment: How Computing is Changing the Problems, Processes and Theories of Design**

New York: Knopf, 1985

An early book on the impact of computers on design, the insights in this book remain prescient today. From a number of collaborators of the Institute of Design, including Jay Doblin, the founder of the field of design planning.

## CHANGING ORGANIZATIONAL BEHAVIOR

Jon R. Katzenbach and Douglas K. Smith

### **The Wisdom of Teams: Creating the High Performance Organization**

Boston, MA: Harvard Business School Press, 1991

An easy and practical read from two McKinsey consultants that outlines the power of intelligently created and applied teams based on extensive research of best practices at a number of successful companies. With the almost universal need for multi-disciplinary teams in most developmental situations, the insights in this book are generally relevant and helpful.

### David A. Nadler, Marc S. Gerstein, and Robert B. Shaw, **Organizational Architecture: Designs for Changing Organizations**

San Francisco, CA: Jossey Bass Pub., 1992

This book highlights the need for new types of organizational design in an increasingly networked world. The first chapter may be of particular interest, drawing parallels between architectural design and physical space and the design and behavior of organizations. The authors are partners at Delta Consulting, one of the world's leading organizational change companies.

### Richard T. Pascale, **Managing on the Edge**

New York: Simon and Schuster, 1990

This book offers useful insights about how strategies, and particularly organizations, need to change in a period of time compression, when everything must be done not only faster but better as well. The author, a noted expert from the human potential movement and one of the developers of the theory behind McKinsey's famous "Seven S's," consistently offers practical insights that thoughtful people will find essential for lessening trauma in times of intense change.

### Michael Schrage, **Shared Minds: The New Technologies of Collaboration**

New York: Random House, 1990

This book outlines the shift from communication to collaboration as a base organizational activity and offers examples of the many emerging technologies and tools that are allowing it to happen in richer, more rapid and more interesting ways than ever before. Schrage, writes widely and thoughtfully on design, new technology and business issues but could definitely do with a haircut.

ARTICLES OF INTEREST

W. Brian Arthur  
**Competing Technologies, Increasing Returns, and Lock-in by Historical Events**  
 The Economic Journal (UK), March 1989, pp 116-131

James Collins,  
**Sometimes a Great Notion**  
 Inc. Magazine, July 1993, p 90-91

Jay Doblin  
**A Short, Grandiose Theory of Design**  
 1987 STA Design Journal (now American Center for Design Journal), pp 6-16

Doblin Group  
**Corporate Identity: What's Next**  
 Design Management Journal, Winter 1996, pp 39-46

Malcolm Gladwell,  
**The Science of Shopping**  
 New Yorker, November 4 1996, pp 66-75

Malcolm Gladwell:  
**Annals of Style; The Coolhunt**  
 New Yorker, March 17 1997, pp 79-88

Gary Hamel,  
**Killer Strategies That Make Shareholders Rich**  
 Fortune, June 23 1997, pp 70-88.

Christopher Ireland, Bonnie Johnson  
**Exploring the Future in the Present**  
 Design Management Journal, Vol. 6, No. 2, Spring 1995

Robert Jensen, ed.  
**Breakthroughs**  
 Design Quarterly, No. 167, May 1997

Larry Keeley  
**Gaining Your Unfair Share of Attention: Decentralizing the Concept of a Brand**  
 Design Management Journal, Spring 1992, pp 34-71

Larry Keeley  
**The Strategic Palette**  
 Communication Arts, May-June 1992, pp 134-139

Larry Keeley  
**Ten Commandments for Success on the Net**  
 Fast Company, June-July 1996, pp 61-62

Peter Laundy and Susan Thornton Rogers  
**Don't Image Your Position, Express Your Character**  
 Design Management Journal, Vol. 6, No. 1, Winter 1995

Justin Martin  
**Ignore Your Customer**  
 Fortune, May 1 1995, pp 121-126

Brian O'Reilly  
**The Secrets of America's Most Admired Corporations: New Ideas New Products**  
 Fortune, March 3 1997, pp 60-64

Charles L. Owen  
**A Critical Role for Design Technology**  
 Design Management Journal, Vol. 4, No. 2, Spring 1992

Peter Passell  
**Why the Best Doesn't Always Win**  
 New York Times Magazine, May 5 1996, pp 60-61

Darrel K. Rhea  
**A New Perspective in Design: Focusing on Customer Experience**  
 Design Management Journal, Vol.3, No. 4, Winter 1993

Rick E. Robinson  
**Making Sense of Making Sense**  
 Design Management Journal, Vol. 5, No. 1, Winter 1994

Rick E. Robinson  
**What to Do with a Human Factor**  
 American Center for Design Journal, Vol. 7, No.1 1993, pp 63-73

Michael Schrage  
**The Culture(s) of Prototyping**  
 Design Management Journal, Vol. 4, No. 1, Winter 1993

John Seely-Brown and Paul Duguid  
**Borderline Issues: Social and Material Aspects of Design**  
 Human Computer Interaction, Spring 1994

Gerald Tellis, Peter Golder  
**First to Market, First to Fail? Real Causes of Enduring Market Leadership**  
 Sloan Management Review, Vol. 37, No. 2

Eric Von Hippel  
**Lead Users: A Source of Novel Product Concepts**  
 Management Science, Vol. 32, No. 7, July 1986, pp 791-805

Robert H. Waterman, Thomas J. Peters, and Julien Phillips  
**Structure is not an Organization**  
 Business Horizons, June 1980, No. 80302, pp 14-26

Willard Zangwill  
**Managers Journal: When Customer Research is a Lousy Idea**  
 Wall Street Journal, Monday 8 March 1993, Sec. A, p 12

**Flops**  
 Business Week Cover Story, August 16 1993, pp 76-82

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 Harvard Business Review, July-August 1996, pp 100-109

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**The Right Game: Use Game Theory to Shape Strategy**  
 Harvard Business Review, July-August 1995, pp 57-71

Francis Gouillart and Frederick Sturdivant  
**Spend a Day in the Life of Your Customers**  
 Harvard Business Review, January-February 1994, pp 116-125

Gary Hamel  
**Strategy as Revolution**  
 Harvard Business Review, July-August 1996, pp 69-82

Gary Hamel and C.K. Prahalad  
**Strategy as Stretch and Leverage**  
 Harvard Business Review, March-April 1993, pp 75-84

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**Corporate Imagination and Expeditionary Marketing**  
 Harvard Business Review, March-April 1993, pp 81-92

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**Core Competence of the Corporation**  
 Harvard Business Review, May-June 1990, pp 79-91

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**Strategic Intent**  
 Harvard Business Review, May-June 1989, pp 63-76

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**The Origin of Strategy**  
 Harvard Business Review, November-December 1989, pp 139-143

Erich Joachimsthaler and David Aaker  
**Building Brands without Mass Media**  
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**Value Innovation: The Strategic Logic of High Growth**  
 Harvard Business Review, January-February 1997, pp 103-112

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**Real-Time Marketing**  
 Harvard Business Review, July-August 1995, pp 87-95

Charles R. Morris and Charles H. Ferguson  
**How Architecture Wins Technology Wars**  
 Harvard Business Review, March-April 1993, pp 86-96

Joseph Pine II, Don Peppers and Martha Rogers  
**Do You Want to Keep Your Customers Forever?**  
 Harvard Business Review, March-April 1995, pp 103-114

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**What is Strategy?**  
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 Harvard Business Review, January-February 1991, pp 30-38

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 Harvard Business Review, January-February 1993, pp 84-93

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 Harvard Business Review, November-December 1985, pp 139-150



