Design as Competitive Strategy
MBA 290D/ENG 290 – 2 units
Spring 2011, Mondays 4-6pm, C325 Cheit

Overview

Instructor: Jon H. Pittman

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Office Hours: Office #F449, Monday 3-4 and by appointment

Class Format: The class will consist of lectures, readings, group discussions, interactive exercises, a group design project and several short assignments – to put the ideas into practice. Class will meet in 325 Cheit and in the Cal Design Lab on the 5th floor of Wurster Hall. The syllabus identifies which days will be in which place. Your student ID card is required for access to the Cal Design Lab.

Class websites: **bSpace.berkley.edu** –Design as a Competitive Strategy – Spring 2011
                Class blog - http://divergentmba.wordpress.com/

                Study.net – for MBAs (Haas covers the cost of readers for MBAs)
- required reading - http://www.study.net/r_mat.asp?crs_id=30018940
- optional reading - http://www.study.net/r_mat.asp?crs_id=30018942

                Study.net – For Engineers (Haas does not cover cost, you need to purchase)
- required reading - http://www.study.net/r_mat.asp?crs_id=30018941
- optional reading - http://www.study.net/r_mat.asp?crs_id=30018943

                Required Texts: The two required texts have been chosen to expose students to methods and theory of design and business models. Students will be expected to read and refer to the texts:

- **<u>The Universal Traveler</u>**. A Soft-Systems guide to creativity, problem-solving, and the process of reaching goals. Koberg and Bagnell, Updated Classic Edition, Crisp

- **<u>Business Model Generation</u>**. A Handbook for Visionaries, Game Changers, and Challengers. Osterwald and Pigneur. Wiley.

Basis for final grade: 30% class participation
                    30% individual assignments
                    40% team design project

Some dates may change subject to availability of guest speakers

Course Description

Companies are increasingly looking to design as a source of competitive advantage. In a world made increasingly competitive through globalization and technological advancement, design is a differentiator that creates customer value and competitive separation. In fact, innovation is the only sustainable form of competitive advantage. Design is the process of systematically creating successful innovation. Many think design is primarily about form – the creation of beautiful objects - but good design balances form, function, and performance. Further, the kind of thinking that is applied to the design of products can also apply to services, processes, customer experiences, and business models.

The purpose of this course is to help students learn design – the skill to systematically create innovative solutions to business problems. The course will explore the relationship between business strategy and design. Students will learn:

❑   the competitive value of design and innovation
❑   how to understand unarticulated customer needs
❑   design skills, methods, processes, and tools
❑   how to apply a systematic and holistic design approach to business problems

This course complements the Management of Technology (MOT) core curriculum New Product Development (NPD) and Design and Systems Thinking (DST) courses.   Whereas the NPD course focuses on specifically product development, this course applies design methods to a broader business context.

Through readings and cases, students will learn how design is applied to a variety of business problems. They will develop design skills through a series of short exercises. They will have the opportunity to work with a team on a project to apply design a business problem and create a solution in the form of a product, service, customer experience, or business model. Students who successfully complete the course will possess a deep understanding of the role of design as a competitive weapon, a set of design skills and methods, and a tangible result from their team design project. They will be prepared to address business challenges in a creative way and will possess unique skills that will be increasingly valuable in a competitive world.

Instructor Bio

Jon Pittman is VP of Corporate Strategy at Autodesk, Inc. He has over 28 years of experience in corporate strategy in software companies that serve designers from various disciplines such as architecture, engineering, and media. He was educated and licensed as an architect. He holds a Bachelor of Architecture and MBA from the University of Cincinnati and an MS in Computer Graphics from Cornell. He has taught at Art Center College of Design, Cornell University, and the Haas School of Business at UC Berkeley. He has extensive international experience and passionately believes in the power of design.

Assignments and Evaluation

Collaboration. Design is a team sport. Innovative solutions come from the confluence of diverse experiences, disciplines, and perspectives. To be an effective innovator you need to be able to work effectively / generatively with others to both create new solutions and to communicate those solutions in a clear and compelling way. Thus, a significant amount of the work you do will be <u>with others</u> – both in class and in the team design project. Design is both hard work and fun.

Class participation. Classroom participation comprises 30% of your grade. Attendance is required and you are expected to be on top of the material and actively engage in class discussions and exercises. Laptops are not permitted unless being used directly for classroom purposes. During class, I will ask you to share your observations and insights on the readings, lectures, cases, and other assignments. One key attribute of successful designers and executives is the ability to clearly and crisply communicate their ideas. You will be actively building that skill, both formally and informally, in class. My philosophy is that you will learn as much from each other as you do from me. Thus, your active participation is expected.

Readings. Two textbooks, one article, and one case are required reading. These readings provide essential background for the class and are designed to supplement the lectures. You are expected to read the required readings and cases prior to class and be prepared to discuss them in class. You will also be required to read one additional book, selected from the supplemental reading list, blog a book report, and lead a brief class discussion on the book. Supplemental readings are also provided for each class session in the event you wish to delve deeper into a given topic. You are encouraged but not required to read them. They will provide additional background and insight for classroom discussion.

Class blog. You will be expected to post your book report to the class blog. You will be expected to critique and comment on others postings. The blog will constitute a portion of your individual assignment evaluation.

Individual assignments. You will be responsible for completing several short individual assignments which comprise 30% of your grade. Some of these will feed into the team assignment; others will be blog posts and interactive exercises.

Team design project. You will have a major design project which will comprise 40% of your grade. This project will be to solve a business problem by designing an innovative solution. I will intentionally assign diverse teams with a variety of disciplines and backgrounds. You will go through a structured process with deliverables at specified intervals. This project will culminate in a team presentation to the entire class. You will be evaluated on both design process and results. You will need to meet outside of class with your team. Your team is encouraged to use faculty office hours for coaching and feedback on your project.

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Class Meetings

Class meets for two hours on Monday afternoons. We will generally – but not always -- use part of the time for lecture and discussion and part for interactive exercises and in-class work on the team design project.

Date	Topics and Issues	Readings and Assignments
Jan 24 **Cheit**	**Design as a competitive strategy** ❑ Innovation is the only sustainable source of competitive advantage ❑ Design is the systematic process of creating innovation ❑ Design is the bridge between invention and innovation ❑ Design methods and tools can be applied to products, services, processes, customer experiences, and business models ❑ Integrative design is a skill that will make you more competitive and enable you to address formidable business and societal challenges.	**Assignment** ❑ ***Individual #1***. Complete 4x6 index card with your background information in class **Required Reading** ❑ ***Design Thinking.*** Tim Brown. Harvard Business Review **Supplemental Reading** ❑ ***What is Strategy?*** Michael Porter. Harvard Business Review. ❑ **Do You Matter?** Robert Brunner. ❑ **A Whole New Mind.** Daniel Pink ❑ ***The Business of Design.*** Bill Breen. ❑ ***A Short Grandiose Theory of Design.*** Jay Doblin
Jan 31 **Wurster**	**What is good design?** ❑ Good design works from a user perspective – it balances of form, function, and performance ❑ Good design provides an integrated user experience ❑ Good design is clear, legible, and memorable ❑ Good design has an inherently consistent logic ❑ Good design delivers superior returns and creates sustainable competitive advantage ❑ There is on one right answer to a design problem. ❑ Design problems are wicked problems ❑ +/Δ	**Assignment** ❑ ***Individual #2***. Present an example of a well-designed product, service, experience, or business model. ❑ ***Individual #3***. Book report proposal **Supplemental Reading** ❑ **The Laws of Simplicity.** John Maeda ❑ ***The Power of Product Integrity*** Kim B. Clark and Takahiro Fujimoto. Harvard Business Review. November-December 1990. ❑ ***Dilemmas in a General Theory of Planning.*** Horst W.J. Rittel and Melvin M. Weber.

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Date	Topics and Issues	Readings and Assignments
Feb 7 **Cheit**	**Design Process** ❑ Design follows a systematic process that brings together left brain (analysis) and right-brain (synthesis) thinking ❑ A model for integrative thinking ❑ Problem-seeking and problem-solving ❑ The designer's mental model of the problem and situation play a key role in design ❑ Developing a culture of prototyping ❑ Building and maintaining and interdependent team ❑ Exercise – team decision making ❑ +/Δ	**Assignment** ❑ *Individual #4 –* Bring a proposed design problem for your team project to class. ❑ *Individual #5 -* IDEO Product Development- Submit case questions. ❑ *Team.* Project team organization. **Required Reading** ❑ **The Universal Traveler.** Pages 1-35, Pages 101-102 ❑ **Business Model Generation.** Pages 244-261 ❑ *Case: IDEO Product Development* **Supplemental Reading** ❑ **The Design of Design**. Fred Brooks. ❑ **The Art of Innovation**. Tom Kelly. ❑ **Innovation X**. Adam Richardson ❑ *IDEO Method Cards*.
Feb 14 **Wurster**	**Mobilizing the Team** *Guest Speaker: Ulrich Nettesheim, Passages Consulting* ❑ Building and maintaining an interdependent team ❑ Model of team performance ❑ Organizing the team and the work ❑ Accepting the problem ❑ Exercise – team organization and work plan ❑ +/Δ	**Assignment** ❑ *Team #1*. Team submits 3 design problem proposals **Required Reading** ❑ **The Universal Traveler**. Pages 36-45. **Supplemental Reading** ❑ **Drive**. Daniel Pink ❑ **The Ten Faces of Innovation**. Tom Kelly ❑ *Innovation as a Learning Process: Embedding Design Thinking*. Sara Beckman and Michael Barry. California Mgmt Review. Nov 2007.
Feb 21	**No class – President's day**	

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Date	Topics and Issues	Readings and Assignments
Feb 28 **Cheit**	**Design Methods** *Guest speaker: Doug Look, Senior Design Strategist, Autodesk* ❑ User centered design, empathic design ❑ How to observe users and systematically assess their needs ❑ Organizing and making sense of user insights ❑ User insight case study ❑ Design strategy techniques ❑ User conceptual models ❑ +/∆	**Assignment** ❑ *Team #2*. Team submits a 3-page project brief and action plan. **Required Reading** ❑ **The Universal Traveler**. Pages 46-65. ❑ **Business Model Generation**. Pages 126-133. **Supplemental Reading** ❑ **Wired to Care.** Dev Patnaik ❑ *An Evolving Map of Design Methods and Design Research*. Liz Sanders
Mar 7 **Wurster**	**Business Models and Processes** ❑ Canonic business models ❑ Representing business models ❑ Synthesizing new business models ❑ Apply design to business models ❑ Exercise – a business model for your project ❑ Mid-term student evaluations ❑ +/∆	**Required Reading** ❑ **The Universal Traveler.** Pages 66-73. ❑ **Business Model Generation**. Pages 14-51 , 135-145 **Supplemental Reading** ❑ **The Design of Everyday Things**. Don Norman ❑ *Lean Consumption.* James P. Womack and Daniel T. Jones. Harvard Business Review
Mar 14 **Wurster**	**Visual Thinking and Design of Strategy** *Guest speaker: Tom Wujec* ❑ Making ideas visible ❑ Using visual methods to solve design and strategy problems ❑ The relationship of design and strategy ❑ The Clarity toolkit ❑ Exercise - The Marshmellow challenge ❑ +/∆	**Required Reading** ❑ **Business Model Generation**. Pages 147-159, 198-225 **Supplemental Reading** ❑ **The Back of the Napkin: Solving Problems and Selling Ideas with Pictures**. Dan Roam. ❑ **Gamestorming**. Dave Gray. ❑ **Visual Meetings**. David Sibbit. ❑ **Experiences in Visual Thinking**. Robert H. McKim ❑ *Clarity Toolkit*. Tom Wujec

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Mar 21	**No class – Spring break**	
Mar 28 Wurster	**Environment and Experience Design** ❑ Experience differentiates in environments, retail, recreation ❑ The customer experience drives engagement with a product, an organization, and an environment ❑ Wayfinding is critical to successful environments and experiences ❑ Exercise – brainstorming ❑ +/∆	**Assignment** ❑ ***Team #3***. Research Results and reframed problem statement **Supplemental Reading** ❑ **Experience Design 1.1** Nathan Shedroff ❑ ***Welcome to the Experience Economy***. B. Joseph Pine and James H. Gilmore. Harvard Business Review ❑ ***The Experience Cycle***. Hugh Dubberly and Shelly Evensen. ❑ ***Experience Design Cards*** Nathan Shedroff
Mar 28 One Market	**Extra Credit – Tour of Autodesk Gallery** ***Guest Speaker: Carl Bass, Autodesk CEO*** One Market, The Landmark, Second Floor San Francisco. 7-9PM. **www.autodesk.com/TheGallery**	This is an extra credit event in the evening to tour the Autodesk Design Gallery in San Francisco and hear Carl Bass talk about the importance of design in the business world.
Apr 4 Wurster	**Mid-term reviews** ❑ Review progress on your team design problems. This class will be presentation and group discussion and critique. ❑ The role of critique in design. ❑ You will be evaluated on presentation style, ability to communicate the essence of the problem, and process and progress to date. ❑ You will be evaluated by your peers and the instructor. ❑ Prototyping ❑ +/∆	**Assignment** ❑ ***Team #4***. Present 3 alternative solutions to your design problem. Define your selection criteria and show which solution your team selected and why. **Required Reading** ❑ **Universal Traveler.** Pages 80-99, 117-118 **Supplemental Reading** ❑ **Serious Play**. Michael Schrage

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Date	Topics and Issues	Readings and Assignments
April 11 **Cheit**	**Sustainable Design** *Guest speaker: Nathan Shedroff* ❑ Designing for sustainability requires an integrative design approach. ❑ The triple-bottom line, the triple top line and other models for sustainable design ❑ Globalization is making sustainable design even more urgent ❑ Systems thinking for sustainable design ❑ Exercise – The Story of Stuff ❑ +/∆	**Supplemental Reading** ❑ **Design is the Problem. The Future of Design Must Be Sustainable.** Nathan Shedroff. ❑ **Cradle to Cradle. Remaking the Way we Make Things**. William McDonough and Michael Braungart. ❑ **The Story of Stuff**. Annie Leonard*.* www.storyofstuff.com ❑ *A Road Map for Natural Capitalism*. Amory B. Lovins, Hunter Lovins, and Paul Hawkin. Harvard Business Review. July-August 2007.
Apr 18 **Cheit**	**Information and Communication Design** ❑ Communication and information design is about getting to the essence of the idea ❑ Organize information for legibility and provide wayfinding and navigation aids. ❑ How to make ideas stick. ❑ The role of symbols and metaphor. ❑ Exercise ❑ +/∆	**Required Reading** ❑ **Business Model Generation**. Pages 160-190 **Supplemental Reading** ❑ **Made to Stick.** Chip Heath and Dan Heath. ❑ **Slide:ology**. Nancy Duarte ❑ **Resonate.** Nancy Duarte ❑ **Presentation Zen.** Garr Reynolds ❑ **Presentation Zen Design.** Garr Reynolds
Apr 25 **Wurster**	**Integrative Design and Design Models** *Guest Speaker, Hugh Dubberly, Dubberly Design Office* ❑ Designers use a wide variety of models to solve problems ❑ Design can be a force that integrates many different disciplines and perspectives. ❑ Design thinkers have transcended traditional boundaries and problem-solving styles ❑ Interdisciplinary and trans-disciplinary approaches are necessary to solve the wicked design problems facing society today.	**Supplemental Reading** ❑ **The Opposable Mind**. Roger Martin ❑ **The Design of Business.** Roger Martin. ❑ **How Do You Design: A Compendium of Models**. Hugh Dubberly. Dubberly Design Office. ❑ **Design for the Real World**. Victor Papanek ❑ *Design Thinking: Notes on its Nature and Use*. Charles Owen. Design Research Quarterly. 2007.

Date	Topics and Issues	Readings and Assignments
	❑ +/∆	❑ ***Design Thinking**: **What It Is, Why It Is Different, Where It Has New Value.*** Charles Owen. ❑ ***The Analysis-Synthesis Bridge Model.*** Hugh Dubberly, Shelley Evensen, and Rick Robinson. ❑ ***Design in the Age of Biology: shifting from a mechanical-object ethos to an organic systems ethos***. Hugh Dubberly. ❑ ***Bucky Fuller***. Wikipedia. ❑ ***Charles and Ray Eames.*** Wikipedia. ❑ ***Arnold Wasserman*** ❑ ***Phillipe Starck***
May 2 Wurster	**Drivers of Change** ***Guest Speaker, Chris Luebkeman, Director for Global Foresight and Innovation, ARUP*** ❑ Many of the challenges facing the world today are the result of not being able to see and address problems holistically and systemically ❑ We can use design techniques to see future issues and drive change. ❑ Integrative design thinking is needed to solve the world's most difficult design challenges. ❑ Course summary and wrap-up ❑ Student evaluation	**Assignment** ❑ ***Individual #6.*** Last day to accept book reports.
May 9 Wurster	**Final projects** ❑ Final reviews of your team design projects – spread over two class sessions. ❑ You will be evaluated on presentation style, ability to communicate the essence of the problem, your rationale for solving the problem, and the viability of your solution.	**Assignment** ❑ ***Team #5***. Deliver a final team presentation for your project. ❑ ***Individual #7.*** Self Assessment

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Assignment Summary

Individual Assignments

1.	Personal Background Information	24-Jan	In class
2.	Example of good design	31-Jan	
3.	Book report proposal	31-Jan	
4.	Proposed Design Problem	7-Feb	
5.	IDEO Case Preparation	7-Feb	
6.	Last day book Reports Due*	2-May	
7.	Self Assessment	9-May	

* Book reports are due on date specified in the assignment. This is the last day they will be accepted

Team Assignments

1.	Three problem proposals	14-Feb
2.	Project Brief	28-Feb
3.	Reframed Problem Statement and research results	28-Mar
4.	Three alternative solutions	4-Apr
5.	Final Team Presentation	9-May

Required Reading

Case and article are available on Study.net

- ❑ **Article:** Brown, Tim. ***Design Thinking***. <u>Harvard Business Review</u>. June 2008. 24-Jan.
- ❑ **Case*:*** *IDEO Product Development*. 7-Feb.
- ❑ **Book:** Koberg and Bagnell. <u>**The Universal Traveler**</u>. **A Soft-Systems guide to creativity, problem-solving, and the process of reaching goals**. Updated Classic Edition, Crisp
- ❑ Book: Osterwalder and Pigneur. <u>**Business Model Generation**</u>. Wiley

	Universal Traveler	**Business Model Generation**
• 7-Feb,	Pages 1-35, 101-102	Pages 244-261
• 14-Feb	Pages 36-45	Pages 126-133
• 28-Feb	Pages 46-65	
• 7-Mar	Pages 66-73	Pages 14-51, 135-145
• 14-Mar		Pages 147-159, 198-225
• 4-Apr	Pages 80-99, 117-118	
• 18-Apr		Pages 160-190

Supplemental Reading – Articles

Harvard Business Review articles below can be found in the optional reading on Study.net. All other articles have web links or can be found on bSpace.

- Beckman, Sara and Barry, Michael. ***Innovation as a Learning Process: Embedding Design Thinking.*** California Management Review. Fall 2007.
- Breen, Bill. ***The Business of Design***. Fast Company. April 2005. http://www.fastcompany.com/magazine/93/design.html
- Clark, Kim B. and Fujimoto, Takahiro. ***The Power of Product Integrity***. Kim B. Clark and Takahiro Fujimoto. Harvard Business Review. November-December 1990
- Doblin, Jay. ***A Short, Grandiose Theory of Design***. Jay Doblin. Available on bSpace.
- Dubberly, Hugh. ***Design in the Age of Biology: Shifting from a Mechanical-Object Ethos to an Organic Systems Ethos.*** http://www.dubberly.com/wp-content/uploads/2009/01/ddo_article_ageofbiology.pdf
- Dubberly, Hugh and Evensen, Shelly. The ***Experience Cycle***. http://www.dubberly.com/articles/interactions-the-experience-cycle.html
- Dubberly, Hugh; Evensen, Shelley; and Robinson, Rick. ***The Analysis-Synthesis Bridge Model.*** http://www.dubberly.com/wp-content/uploads/2008/06/ddo_interactions_bridgemodel.pdf
- Immelt, Jeffrey R, Govindarajan, Vijay, and Trimble, Chris. ***How GE Is Disrupting Itself.*** Harvard Business Review. October 2009.
- Lovins, Amory B, Lovins Hunter, Hawkin, Paul. ***A Road Map for Natural Capitalism***. Harvard Business Review. July-August 2007*.*
- Owen, Charles. ***Design Thinking: What It Is, Why It Is Different, Where It Has New Value.*** Proceedings of the International Conference on Design Research and Education for the Future, South Korea, October, 2005. Available from the Chicago's Institute of Design, ITT web site, http://www.id.iit.edu/141/
- Owen, Charles. ***Design Thinking: Notes on its Nature and Use***. 2007. Design Research Quarterly, 2(1), p.16-27. Available from the Chicago's Institute of Design, ITT web site, http://www.id.iit.edu/141/
- Pine, B. Joseph and Gilmore, James H. ***Welcome to the Experience Economy.*** Harvard Business Review. July-August 1988.
- Porter, Michael. ***What is Strategy?*** Harvard Business Review. November-December 1996.
- Prahalid, C.K. and Hammond, Allen. ***Serving the World's Poor, Profitably***. Harvard Business Review. September 2002.
- Rittel, Horst W.J and Weber, Melvin M. ***Dilemmas in a General Theory of Planning***. Policy Sciences. 1973. http://www.uctc.net/mwebber/Rittel%2bWebber%2bDilemmas%2bGeneral_Theory_of_Planning.pdf
- Sanders, Liz. ***An Evolving Map of Design Practice and Design Research.*** http://www.dubberly.com/wp-content/uploads/2009/01/ddo_article_evolvingmap.pdf
- Wikipedia. ***Wikipedia. Bucky Fuller.*** http://en.wikipedia.org/wiki/Buckminster_Fuller
- Wikipedia. ***Charles and Ray Eames.*** http://en.wikipedia.org/wiki/Ray_Eames
- Womak, James P and Jones, Daniel T. ***Lean Consumption.*** Harvard Business Review. March 2005

Supplemental Reading – Books

Select one of these books for your book report assignment

❑ Brooks, Fred. **The Design of Design: Essays from a Computer Scientist**. Addison Wesley. 2010.

❑ Brown, Tim**. Change By Design. How Design Thinking Transforms Organizations and Inspires Innovation.** Harper Business. 2009

❑ Brunner, Robert, and Emergy, Russ. **Do You Matter? How Great design will make people love your company.** 2008. FT Press

❑ Dubberly, Hugh. **How Do You Design: A Compendium of Models**. Dubberly Design Office.
http://www.dubberly.com/wp-content/uploads/2008/06/ddo_designprocess.pdf

❑ Duarte, Nancy. **Slide:ology: The Art and Science of Creating Great Presentation**. O'Reilly. 2008.

❑ Duarte, Nancy. **Resonate: Presenting Visual Stories that Transform Audiences**. Wiley. 2010

❑ Gray, Dave; Brown, Sunni; and Macanufo, James. **Gamestorming: A Playbook for Innovators, Rulebreakers, and Changemakers**. O'Reilly. 2010.

❑ Heath, Chip and Heath, Dan**. Made to Stick.**. 2007. Random House

❑ Kelly, Tom. **The Art of Innovation. Lessons in Creativity from IDEO**. 2001. Doubleday

❑ Kelly, Tom. **The Ten Faces of Innovation**. 2005. Dobleday.

❑ Maeda, John. **The Laws of Simplicity. Design, Technology, Business, Life**. 2006. MIT Press.

❑ Martin, Roger. **The Opposable Mind**. **How Successful Leaders Win Through Integrative Thinking**. 2007. Harvard Business School Press

❑ Martin, Roger. **The Design of Business. Why Design Thinking is the next competitive advantage**. 2009. Harvard Business School Press.

❑ McDonough, William and Braungart, Michael. **Cradle to Cradle. Remaking the Way we Make Things**. North Point Press. 2002.

❑ McKim, Robert H. **Experiences in Visual Thinking.** 2003. Thomson.

❑ Norman, Donald A. **The Design of Everyday Things**, Donald A. Norman, Basic Books

❑ Papanek, Victor. **Design for the Real World:** Human Ecology and Social Change. 2000. Academy Chicago Publishers.

❑ Patnaik, Dev. **Wired to Care: How Companies Prosper When They Create Widespread Empathy**. 2009. FT Press.

❑ Pink, Daniel H. **A Whole New Mind:** Moving from the Information Age to the Conceptual Age. Riverhead Books. 2005

❑ Pink, Daniel H. **Drive: The Surprising Truth about What Motivates Us**. Riverhead. 2009.

❑ Reynolds, Garr. **Presentation Zen. Simple Ideas on Presentation Design and Delivery**. 2008. New Riders.

❑ Reynolds, Garr. **Presentation Zen Design: Simple Design Principles and Techniques to Enhance Your Presentations.** 2010. New Riders.

- ❑ Richardson, Adam. **Innovation X: Why a Company's Toughest Problems Are It's Greatest Advantage**. 2010. Jossy-Bass.
- ❑ Roam, Dan. **The Back of the Napkin: Solving Problems and Selling Ideas with Pictures.** 2008. Digital Roam.
- ❑ Shedroff, Nathan. **Design is the Problem. The Future of Design Must be Sustainable.**. Rosenfeld Publishing. 2009.
- ❑ Shedroff. Nathan. **Experience Design 1.1. A Manifesto for the Design of Experiences**. Experience Design Books. 2009.
- ❑ Sibbit, David. **Visual Meetings: How Graphics, Sticky Notes, and Idea Mapping Can Transform Group Productivity**. Wiley. 2010.

Other Resources

Several designers have developed design toolkits - which might be useful resources

- ❑ **Clarity Toolkit.** Tom Wujec (draft available on bSpace)
- ❑ **Drivers of Change.** ARUP, Chris Luebkeman. Prestel. http://www.driversofchange.com/doc/2009/
- ❑ **Experience Design Cards 1.** Nathan Shedroff. Experiencedesignbooks.com
- ❑ **IDEO Human Centered Design Toolkit.** http://www.ideo.com/work/human-centered-design-toolkit/
- ❑ **IDEO Method Cards.** IDEO. http://www.ideo.com/work/ideo-method-card-app. Available as physical cards or as an Iphone app.

Web Resources

- ❑ **www.autodesk.com.** Autodesk is the world leader in design innovation technology. Information on software and design trends in general.
- ❑ **Students.autodesk.com.** Student community providing free software for students and educators.
- ❑ **www.businessweek.com/innovate**. Businessweek innovation magazine. Lots of good content on the relationship between design and business strategy.
- ❑ **www.cdf.org.** The Corporate Design Foundation a non-profit education and research organization. Our mission is to improve the quality of life and the effectiveness of organizations through design
- ❑ **www.core77.com.** Prolific industrial design site. Also has an rss feed.
- ❑ **www.dmi.org.** Design Management Institute is an international nonprofit organization that seeks to heighten awareness of design as an essential part of business strategy.
- ❑ **www.doblin.com**. Chicago innovation firm with close ties to the Institute of Design at IIT. Now a part of the Monitor group.
- ❑ **www.dubberly.com**. The Dubberly Design Office is run by Hugh Dubberly – a friend and colleague. Hugh is a prolific writer on design topics. His site features a number of design-related white papers and diagrams.

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❑ **www.fastcodesign.com.** Fast Company's CoDesign site. A new story on design every day. Also has an rss feed.
❑ **www.frogdesign.com**. A global innovation firm based in San Francisco.
❑ **www.gravitytank.com**. Chicago innovation consulting firm with close ties to IIT's Institute of Design.
❑ **www.ideo.com**. IDEO's site is a treasure trove of information about design. Tom Brown's Design Thinking blog and RSS feed can be found here. Resources on the site worth checking out are:
 • **Human Centered Design** Toolkit – an open-source toolkit that uses human-centered design to inspire new solutions to difficult challenges in the developing world. Available for download from http://www.ideo.com/work/featured/human-centered-design-toolkit.
 • **Patterns – design insights emerging and converging** – a collection of design challenges – available as an RSS feed at patterns.ideo.com
❑ **www.id.iit.edu.** The Institute of Design at Illinois Institute of Technology is one of the seminal graduate programs in human centered design. A number of their publications are available at www.id.iit.edu/141/
❑ **www.jnd.org**. Don Norman is one of the great thinkers in design. He is a cognitive psychologist who is a keen observer and commentator on design.
❑ **www.kluster.com**. Kluster™ is a collaborative decision making platform — a turbo-charged collective wisdom machine that turns questions into answers, ideas into opportunities, and analysis into action. Unlike conventional "crowdsourcing" that pits people and ideas against each other, Kluster™ brings them together. Our approach is based on real-world group decision-making models, taking into account individual influence and participation. Not only does Kluster™ identify the best ideas, it actually improves them in the process.
❑ **www.method.com**. An independent design and strategy consultancy
❑ **www.stanford.edu/group/dschool**. The Hasso Plattner Institute of Design at Stanford, also known as the Stanford d.school. The d.school has close ties to IDEO.
❑ **www.storyofstuff**. The Story of Stuff by Annie Leonard is a great example of minimalist communications design. Her message very much resonates with discussions about sustainable design and social responsibility in design.
❑ **www.techship.ws.** TechShop is a membership-based workshop that provides members with access to tools and equipment, instruction, and a community of creative and supportive people so they can build the things they have always wanted to make. Great prototyping resources.
❑ **www.ted.com.** Annual TED (Technology, Entertainment, and Design) conference. Videos of speakers with lots of design content. A TED blog and RSS feed can be found here.