

First, to set the context, the course starts with elaborating why innovation matters in today's business environment and discuss basic concepts in innovation management and new product development (e.g., models of innovation and high tech marketing, S-curves, psychology of product adoption, etc.). Special focus is placed on strategic issues in the management and marketing of innovations (e.g., managing discontinuous and disruptive innovations).

Second, we will concentrate on the so called "fuzzy" front-end of the new product development (NPD) process. Specifically, we will focus on (a) how companies can best identify consumer needs for new products, (b) how companies can best generate and select valuable new product ideas. In this regard, we will focus on novel ways to identify new customer needs and opportunities (e.g., market research through communities, market research through lead users). We will also discuss ways to reduce uncertainty in the NPD process. In this context, we will also explore ways how to facilitate creativity in the NPD process. Furthermore, we will investigate which organizational structures facilitate (vs. impede) innovation, or which instruments can enhance the cooperation between R&D and marketing.

Third, the course focuses on classical new product marketing – for example, what you, as a manager, can do to optimally market and position your new product in the marketplace. In particular, ways how new products can create value above and beyond the objective quality of the products (as it is for example the case, with Apple's products) will be addressed. Moreover, we will discuss how new products can best break through the clutter and get consumers' attention, as well as basics of branding and brand management. We will also discuss main principles of marketing communications and advertising in particular.

Note that students should have basic marketing knowledge as taught in undergraduate courses.

Course Policy

Be prepared: Make sure to read the assigned articles and cases carefully. We can only have a meaningful discussion of the topic in class if you come prepared.

Contribute to discussion: Every session will involve class discussion. Please be ready to participate consistently with the goal of advancing the class discussion.

Attend class: You will be expected to attend the sessions. Absences will hurt your participation grade because if you are not there, you cannot contribute to the discussion.

Arrive on time: Be on time for class, late arrivals disturb the class and will have a negative impact on your participation grade.

Respect deadlines: Please submit your assignments before the deadline. Late assignments will not be accepted.

Be honest: Be honest in all your submissions. Plagiarism and cheating will be detected and penalized with failure.

Electronic equipment: The use of laptop computers and cell phones is generally not appreciated as it can disturb fellow students and class discussion. If you do not want to refrain from using your laptop, use it *only for taking notes* and ensure that the wireless function is disabled.

Course Organization and Requirements

This course will follow an interactive lecture/case discussion format.

Proficiency will be calculated on a scale from one to 100 and the percent score will then be translated into the conventional grading scale. You can harvest points from three different sources as shown in the following table. Details on these course requirements are discussed subsequently.

<u>Grading Element</u>	<u>Graded</u>	<u>Points</u>
Group Assignments	In groups	45
Class Participation	Individually	5
Final Exam	Individually	50

Group Assignments (45 points)

Since this course is concerned with developing and managing new products, you will organize into teams of 4 members each, and develop a new product (concept). Please send the name of the teams to Gabriela Loparco: gabriella.loparco@tum.de by the third session). Thus, you will have a hands-on opportunity to go through the development stages yourself. Since cross-functional teams are recommended in the NPD process, consider the issue of diversity when choosing team members. More details regarding the project requirements will be provided in a separate handout during the second week of class.

At the end of the course, each team will present their new product concept to the class and hand in a project report. The grade on the overall project (same for all members) accounts for 45 points)

All team members are expected to contribute to the group assignments. Free-riding will not be tolerated. Each team member will be given the opportunity to submit evaluations of the other team members' contributions. Before using this option please carefully consider its implications and whether you can address the issue within the group. Take up on this opportunity, however, if you feel there is a free-riding problem.

Working in groups can be of great value to help you maximizing the learning from the course. Working in a group however is not always easy. Friction and disagreement can pose substantial problems for groups, potentially leading to stress and dissatisfaction. Managing group work is therefore one of the learning objectives of this course. This means that you should try to solve potential problems by yourselves in a mature and responsible way. However, in case of serious problems talk to me before the situation becomes irreparable

Class Participation (5 points)

Please make sure that you come prepared to class and participate in the discussions. Note that your class participation grade will be based on providing insightful comments (quality and not quantity counts) and bringing up relevant points of discussion.

Final Exam (50 points)

A closed-book exam will take place in December. The exam tests your knowledge on the topics covered in the course. It will probe your understanding of the tools discussed during the course as well as your ability to apply these tools to real business situations.

Course Materials

I am not a great fan of large textbooks, so there is no textbook for this course. You are required to read a number of articles on the core issues covered in each session and related case studies.

Some of the readings that are not available online will be uploaded on the learning platform (under “Course Readings”); please download the remaining articles from the University’s Library website.

Of course, there are a number of Innovation Management and New Product Development textbooks around. For this course, I strongly recommend the book by Merle Crawford and Anthony C. di Benedetto on New Product Development (although the book is not mandatory; New Products Management, McGraw-Hill ISBN: 978-007-126336-8). This book might be particularly useful for your group assignment (so you might be advised that you at least have one book in your group). Note that you need to show “entrepreneurial” skills when you conduct your group assignment (not all steps of the new product development process will be discussed in class). You might identify useful concepts regarding the write-up of your report that are not covered in the course materials – for example, SWOT analysis, competitor analyses of the market, definition of target segment, positioning statement, etc. Moreover, I strongly recommend the book by Scott, Armstrong, *Persuasive Advertising*, Palgrave MacMillian, New York.

For interested students, I additionally also recommend the textbook by Melissa Schilling as well as Jacob Goldenberg and David Mazursky (the latter is particularly helpful for your projects – ie., the new product development assignment).

Schilling, Melissa A. (2010). *Strategic Management of Technological Innovation*. (3rd edition). McGraw-Hill: New York.

Goldenberg, Jacob, Marzursky, David (2002). *Creativity in Product Innovation*. Cambridge. Cambridge University Press. <http://files.meetup.com/2477702/creativity%20in%20product%20innovation.pdf>

Course Schedule

A detailed course schedule including descriptions of the sessions (italics) and readings (indented) is presented on the following pages. The schedule **can be subject to changes during the term** (i.e., it constitutes only a guideline). It is your responsibility to keep informed about the course progress.

Session 1 (12/10)

Fundamentals of High-Tech Marketing and Innovation Management

Readings by Schilling, M. (2010) (master copies will be uploaded on the study platform)

Additional readings:

Christensen C. M. (1992). Exploring the limits of the technology S-Curve. *Production and Operations Management*, Part 1 & Part 2. 1 (4), 334-366.

Session 2 (14/10)

Marketing Strategy and High-Tech Marketing

Lucas, H. C., J. M. Goh (2009). Disruptive technology: How Kodak missed the digital photography revolution. *Journal of Strategic Information Systems*. 18, p. 46-55.

Bower, J., & Christensen, C. (1995). Disruptive technologies: Catching the wave. *Harvard Business Review*, 73 (1), 43-53.

Session 3 (19/10)

Marketing Strategy and High-Tech Marketing

Teece, D. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, 15 (2), 285-305.

Chandy, Rajesh K. and Tellis, Gerard J. (1998). Organizing for radical product innovation: The overlooked role of willingness to cannibalize. *Journal of Marketing Research* 35(4):474-487.

Kim, W. Chan, & R. Mauborgne (2005). Blue ocean strategy. *Harvard Business Review*, October, 76-84.

Session 4 (21/10)

Fundamentals of New Product Introduction

Boulding, W. & M. Christen (2001). First mover disadvantage, *Harvard Business Review*, 20-21.

Schneider, J. & J. Hall (2011). Why most product launches fail. *Harvard Business Review*, April, 2-4.

Gourville, J. T. (2006). Eager sellers and stony buyers. *Harvard Business Review*. 84(6), 98–106.

Session 5 (26/10)

Managing and Building Brands I

Keller, K. L., B. Sternthal, A. Tybout. 2002. Three questions you need to ask about your brand. *Harvard Business Review* 80(9, September) 80-89.

Ward, S., L. Light, J. Goldstine (1999). What high-tech managers need to know about brands. *Harvard Business Review* 77(4). 85-95.

Session 6 (28/10)

Managing and Building Brands II

Aaker, David A. 1990, Brand Extensions: The Good, the Bad, and the Ugly. *MIT - Sloan Management Review*, 31 (Summer), 47- 56.

Ward, S., L. Light, J. Goldstine (1999). What high-tech managers need to know about brands. *Harvard Business Review* 77(4). 85-95.

Session 7 (02/11)

Market Research: Identifying Gaps in the Market, Identifying Consumer Problems and Needs

Crawford, M., & di Benedetto, C. A. 2008. Chapter 5 (pp. 109-126) and Chapter 6 (pp. 131-145). In *New Products Management*. McGraw – Hill Irwin, New York.

Additional reading:

Bartl, M., S. Hueck, & S. Ruppert. (2009). Netnography research. Community insights in the cosmetic industry. *ESOMAR*, p. 1-12.

Leonard, D., Rayport, J. F. (1997). Spark innovation through empathic design. *Harvard Business Review*, December, 102-113.

Session 8 (04/11)

New Product Development: Creativity and Idea Generation

Goldenberg, J., R. Horowitz, A. Levav, & D. Mazursky (2003). Finding your innovation sweet spot. *Harvard Business Review*, 81 (March), 120–29.

Jonah Lerner. 2012. Annals of Ideas. Groupthink. The Brainstorming Myth. *The New Yorker*.
http://www.newyorker.com/reporting/2012/01/30/120130fa_fact_lehrer?currentPage=all

Session 9 (09/11)

New Product Development: Creativity and Idea Generation II

IDEO

von Hippel, E. (2001). Innovation by user communities: Learning from Open-Source software. *MIT Sloan Management Review*, 42 (4), 82-86.

Session 10 (18/11)

Developing Breakthrough Innovations

Huston, L., & N. Sakkab (2006). Connect and develop. Inside Procter & Gamble's new model for innovation. *Harvard Business Review*, March, 58–66.

von Hippel, E., Thomke, S., Sonnack, M. (1999). Creating breakthroughs at 3M. *Harvard Business Review*, 77 (5), 47-57.

Session 11 (23/11)

Managing the Innovation Process Product Innovation within the Firm

Cooper, R.G. (1990). Stage-gate systems: A new tool for managing new products. *Business Horizons*. May-June. 44-54

Griffin, A., & Hauser, J. R. (1996). Integrating R&D and marketing: a review and analysis of the literature," *Journal of Product Innovation Management*, 13 (3), 191–215.

Session 12 (25/11)

Marketing Communications and Advertising I

Armstrong, S. 2010. *Persuasive Advertising*. Palgrave MacMillan, New York, Chapter 1, pp. 27-62.

Session 13 (30/11)

Marketing Communications and Advertising II

Armstrong, S. 2010. *Persuasive Advertising*. Palgrave MacMillan, New York, Chapter 1, pp. 95-97.

Session 14 (02/12)

Co-Creation of Value

Ogawa, S. & F. T. Piller. 2006. Collective customer commitment: Reducing the risks of new product development. *MIT Sloan Management Review*, 47 (2), 65-72.

Fuchs, C. & M. Schreier. 2011. Customer empowerment in new product development. *Journal of Product Innovation Management*. 28(1), 17-32.

Session 15 (07/12)

Wrap Up

Session 16 (To be announced)

Exam

Session 17 (to be announced)

Group Presentations of Projects

Session 18 (to be announced)

Group Presentations of Projects

Instructor Bio

Dr. Christoph Fuchs is Chaired Professor of Marketing at TUM School of Management, Technische Universität München and Visiting Professor at the Rotterdam School of Management, Erasmus University. His fields of expertise involve the customer co-creation, branding, as well as consumers' reactions to novel marketing strategies. Christoph Fuchs' work has been published in leading marketing and innovation journals such as the *Journal of Marketing*, *Management Science*, the *Journal of Product Innovation Management*, or the *Journal of the Academy of Marketing Science*. His research has been awarded several prizes in the field of marketing and new product management. Dr. Fuchs gained industry experience at IBM Central and Eastern Europe in market planning and distribution management. He has also been involved in several consulting projects with major global companies (e.g., T-Mobile) as well as start-ups (e.g., Spineliner).