



Course program and reading list

Semester 6 Year 2024

School: Arison School of Business MBA

Systematic Creativity

Lecturer:

Prof. Jacob Goldenberg jgoldenberg@runi.ac.il

Teaching Assistant:

Mr. Doron Maman maman.doron@post.runi.ac.il

Course No.:	Course Type :	Weekly Hours :	Credit:
2914	Lecture	4	2

Course Requirements :	Group Code :	Language:
Final Paper	1202230	English



Course Description

You should learn to stop, or otherwise no worthwhile idea will catch up with you

- Doug King

Course Overview:

The ability to solve problems creatively and generate change is a recognized standard of success and plays an important role in gaining a competitive advantage in many areas of business management. Despite the enormous effects of creative ideas in management, this is one component in managers' work, which traditionally defies quantitative evaluation or the applications of systematic approaches.

Not only is the original idea itself difficult to evaluate precisely, the ability to generate such

ideas is generally considered an inherent personality trait that cannot be acquired: Creative people, it is generally believed, are born, not made. The conventional approach is, therefore, to view creative managers as a different class of individuals. Although creative individuals may have some degree of difficulty working on routine tasks or in a team, they compensate for these shortcomings by coming up with ideas that no one has ever thought of before. According to this approach, the stroke of genius or inspiration may occur once in ten years, yet the organization will benefit by waiting patiently to reap the fruits of its creative managers.

This course reflects a completely different approach to creativity, and is grounded in the assumption that creative thinking is not different from other cognitive processes used in the best professional reasoning. Creative thought processes simply differ in the distinct orientation they establish to define problems: Creative problem solving directs the solver to search in areas that are potentially richer in creative solutions. Creativity, then, is a skill, which can be acquired and improved by practice; It can be part of the manager's toolbox, and it can be applied on demand.



Course Goals

Course objectives:

This course is designed to teach students several systematic creative problem solving methodologies that complement other managerial tools acquired in undergraduate and graduate studies. These methodologies should be appropriately implemented when managers decide to search for a creative solution.

The course offers students the opportunity to learn how to solve problems, identify opportunities, and generate elusive ideas that potentially generate enormous benefits to organizations with a very small investment.

This course will focus on new product ideation and creative marketing actions. We will also touch upon communications and dilemma resolution.

Content:

The course is considered a hybrid course, online video-lectures, in class sessions and a final group project.

You will watch the lecture videos on your own time, read the given online references and attend classes. We attach our recommendation for when to watch the videos during the first two weeks, but as mentioned earlier, it is up to you to decide when to watch the videos during the first couple of weeks.

It is required to follow the weekly agenda and keep up with the course content throughout the entire semester.

Lectures will review systematic tools (termed *creativity templates*) and cover the rationale

of structured thought processes.

Course Topics:

- "First we throw dust in the air and then claim we can't see..."
Defining creative solutions. The attributes of creative ideas. Conventional approaches to the study of creativity. The trap of modern marketing and the illusion of appealing to the customer.
 - The *Attribute dependency* template and the *Function Follows Form* (FFF) principle.
Creating a connection between inherently independent variables.
 - The *Forecasting Matrix*
Managing the search of attribute dependency through a forecasting matrix.
 - The *Close(d) World Principle* and the *Replacement* template
The Close(d) World Principle defines a hidden space with high density of creative ideas. Using existing resources to generate new value.
 - The *Subtraction* (with Replacement) Template
The less the merrier: Improving product functionality by reduction and elimination. Divide or multiply or perhaps both? Simpler templates that offer complementary spaces of ideas.
 - The *Division* and the *Multiplication* templates
Two more templates: How to manipulate components inside the box.
 - The *Contradiction* principle and the *Necessary Conditions* line of thought.
Thinking through necessary conditions vs. sufficient conditions. Defining a contradiction. Using a contradiction to chart specified ideas hidden by specified fixations. The contradiction was the first discovery in the systematic creativity research (around 1940), and it is still the most fascinating.
 - Beyond innovation.
Implementing templates in advertising, negotiations, strategy, and other fields.
-

Grading

Class attendance: Attendance in all 4 class lectures is required. In addition you will be required to view all online video content, read 3 case studies (listed below) and participate in the online forum discussions.

Grading:

1. Participation: **5% of your final grade:** Active and intelligent participation in class meetings, watching online content.
2. Final course project: **50% of your final grade:** Teams (groups of 4 students of your choice) will generate creative (and feasible) ideas for a new product for a specific company, defined by the course staff. Teams will also define and implement an entry strategy for their idea, emphasizing the quality of the idea and the underlying systematic process. In the final class, teams will present their new product

concepts and the use of the creativity templates which led to the idea. You will grade your friends' ideas on originality, success potential, and probability of adoption by the firm. In addition, the course staff will grade the projects presented to evaluate correct use of the templates. The presentation files will be submitted. Two weeks after the end of the semester you will submit a full written report in addition to the presentation given on in the last class. Detailed instructions will be given during the course.

3. Individual Assignment: **45% of your final grade:** Using OMNIVATI, choose one of the following popular applications (Netflix, Duolingo, LinkedIn, Uber, Airbnb, Spotify, Tinder, Zoom, Snapchat, Facebook, Instagram, TikTok) and create three ideas that are based on three different SIT templates. Following this, present a contradiction from one of the ideas (there is no need to solve this contradiction - but you get additional points for successfully solving it by applying one of the templates). When handing in this assignment, please send the OMNIVATI link that you prepared along with a summary of your creative ideas and contradiction.

Guidelines for written essays:

The final written group project report should include:

1. An analysis of the product/service you have been working on, making use of two ideas for each template covered in class. In addition, define one contradiction only (no need to solve it). You may include the idea that was presented in class, or any other idea you came up with during your analyses. Remember that the grade on the assignment is only the accuracy of the analysis, not the originality of the idea.
2. Please describe in detail the process leading to the idea you decided to present in class, including decisions you made during the discussions. For the rest of the ideas, explain only why it belongs to the template.
3. A description of the target audience and the degree to which the product/service is attractive from a marketing perspective (only for the idea you presented in class).
4. Present a solution of one *second order* problem and what are the new benefits obtained (this will be explained in class).
5. Three additional ideas that you came up with during the analysis, which you competed with the idea you presented, and you decided to drop. The three ideas should be based on at least two other templates than the one you used for the presented idea.
6. The PowerPoint presentations you used in class (you are allowed to improve it based on comments and questions, if you feel it is important). Unless you inform us about any objection, we plan to send it to the corporate experts from the firm.
7. The Omnivati report, along with a link to the matrix.

The final written group project report should include:

1. The written report should not exceed 4 pages of text in font size 12.

There is also a web-based tool for you to use

You will be asked to use the SIT web-based platform Omnivati (<https://app.omnivati.com/>), that you already met in another course, which assists in implementing the Attribute-dependency template. You will be asked to use this tool during this course (mainly for the purpose of working on the final assignment, as will be later explained).



Lecturer Office Hours

Professor: Jacob Goldenberg (Yanco)

E-mail: jgoldenberg@idc.ac.il

TA: Doron Maman

E-mail: doron@excellentisrael.com

Please schedule before via mail.



Reading List

Required Reading:

Case studies:

Goldenberg Jacob, Schrift Rom (2017) "Creative Connections: How Companies Innovate by Crafting New Links between Attributes", Columbia CaseWorks

Goldenberg Jacob, Schrift Rom (2016) "Less Is More: How Industry Giants Like Apple and Philips Really Innovate", Columbia CaseWorks

Goldenberg Jacob, Schrift Rom (2018) "Go Forth and Multiply: Unlocking Successful Innovation", Columbia CaseWorks

Course Book:

Boyd Drew. Goldenberg Jacob. (2013), "Inside the Box: A Proven System of Creativity for Breakthrough Results". Simon & Schuster.

Additional reading (optional)

Goldenberg J. Mazursky D. (2002), "Creativity in Product Innovation". Cambridge Press.

Abbie Griffin and John R. Hauzer (1993) The voice of the Customer. *Marketing Science* Vol 12 1-26.

Altschular G .S. (1986), *To find an idea: Introduction to the theory of solving problems of Inventions*, Novosibirsk, USSR, Nauka.

Booz, Allen and Hamilton (1982) *New Product Management for the 1980's* New York: Booz, Allen and Hamilton INC.

Calantone J. Roger and Benedetto C. Anthony (1988) "An Integrative Model of the New Product Development Process: An Empirical Validation, *Journal of Product Innovation Management* Vol. 5(3) P. 201-215.

Diehl M., Stroebe W. (1987) Productivity Loss in Brainstorming Groups: Toward the Solution of the Riddle. *Journal of Personality and Social Psychology*, 53 p' 497-509

Elron Efrat and Jacob Goldenebrg (1999), Brainstorming – Thunder and Lightening or a Storm in a Teacup?, *Executive*, Vol. 32 April, p 10-15 (Hebrew).

Goldenberg J. Mazursky D. Solomon S. (1999), Creative Sparks *Science*, volume 285, (5433) September p. 1495-6.

Goldenberg J. Mazursky D. Solomon S., (1999) Templates of original innovation: Projecting original incremental innovations from intrinsic information *Technological Forecasting and Social Change*, May, Vol. 61/1 P. 1-12.

Goldenberg Jacob and David Mazursky (1999), The Voice of the Product: Templates of New Product Emergence,, *Innovation and creativity Management*, September Vol. 8, 3, 157-164.

Goldenberg Jacob, David Mazursky and Sorin Solomon (1999), "Creative Sparks," *Science*, vol. 285, (5433) September p. 1495-6.

Goldenberg Jacob, David Mazursky, and Sorin Solomon (1999), "Toward Identifying the Inventive Templates of New Products: A Channeled Ideation Approach," *Journal of Marketing Research*, 36 (May), p. 200-210.

Goldenberg Jacob, Donald R. Lehmann and David Mazursky (1999), The Primacy of the

Idea Itself as a Predictor of New Product Success a *MSI working paper*, Report No. 99-110.

Goldenberg Jacob, Donald R. Lehmann and David Mazursky (2001), "The Idea Itself and The Circumstances of Its Emergence as Predictors of New Product Success", *Management science*, Vol. 47, No. 1, January, p. 69-84.

Goldenberg Jacob, Roni Horowitz, Amnon Levav and David Mazursky, (2003), Finding the sweet spot of innovation, *Harvard Business Review*, March p 120-29.

Goldenberg Jacob. Mazursky David . Solomon Sorin. (1999), Creativity Templates: Towards Identifying the Fundamental Schemes of Quality Advertisements *Marketing Science*, Vol. 18, No. 3 p. 333-351.

Golder N. Peter and Tellis J. Gerard (1997) Will It Ever Fly? Modeling The Takeoff of Really New Consumer Durables, *Marketing Science* Vol 16 (3) P. 256-70

Hofstadter Douglas R. (1995), *Fluid Concepts and Creative Analogies*. BasicBooks (Harper Collins Publishers)

Maymon Oded and Horowitz Roni.. (1999): Sufficient Condition for Inventive Ideas in Engineering *IEEE Transactions, Man and Cybernetics*, Vol 29. 3 (August), 349-61.

Paulus B. Paul, Dzindolet T. Mary, Poletes George and Mabel L. Camacho (1993), Perception of Performance in Group Brainstorming: The illusion of Group Productivity. *PSPB*, Vol 19 No 1 February, P. 78-89

Perkins D.N (1981) *The mind's Best work*, Harvard University Press Urban, Glen L. and Hauser John R. (1993), *Design and Marketing of New Products*. New Jersey: Prentice Hall.

Weisberg Robert W. (1992), *Creativity Beyond The Myth Of Genius*. W.H.Freeman Company N.Y.,