Management of Creativity

Course Objectives

The success of any creative work depends not only on the ability to find good ideas, but on the skills for developing, managing and presenting those ideas to others. This course will explore different techniques for finding and developing ideas, and apply them in common project and professional situations, such as presenting design briefs to potential clients, pitching ideas to peers or superiors, and winning design or creative debates with others. Further, students will learn techniques for improving the flexibility and originality of their thinking and will explore approaches used by managers and organizations to create and sustain high levels of innovation.

Syllabus

Creativity and concepts, idea and opportunity, ideation process, systematic inventive thinking and decision and ownership.

Expected Outcome

Upon completion of this course, the students will be able to:

1. Understand building blocks of ideation and thinking skills 2. Be familiar with processes and methods of creative problem solving: observation, definition, representation, ideation, evaluation and decision making 3. Enhance their creative and innovative thinking skills 4. Be familiar with creative and innovative thinking styles 5. Understand risk taking, paradigm shift, and paradigm paralysis

References

1. Chris Bilton, Management and Creativity: From Creative Industries to Creative Management, Wiley-Blackwell.

2. E. de Bono, Serious Creativity: Thoughts on Reinventing Society, Vermilion.

3. E. de Bono, The Use of Lateral Thinking, Penguin Books.

4. E. de Bono, Six Thinking Hats, Penguin.

5. E. Sickafus: Unified Structured Inventive Thinking, Ntelleck.

6. Donald H. Weiss: Creative Problem Solving, Amacom.

7. Ira Flatow: They All Laughed From Light Bulbs to Lasers, San Val.

8. James Higgins: 101 Creative Problem Solving Techniques: The Handbook of New Ideas for Business, San Val.

9. Scott Shane, A General Theory of Entrepreneurship The Individual-Opportunity Nexus, Edward Elgar Publishing Ltd.

10. J G. Altschuller: Creativity as an Exact Science, CRC Press, 1984

11. H. Altov: The Art of Inventing (And Suddenly The Inventor Appeared), Technical Innovation Ctr, 1995 12. Genrikh Altshuller, Lev Shulyak and Steven Rodman: 40 Principles: Triz Keys to Technical Innovation: 1 (Triztools, V. 1), Technical Innovation Ctr, 1997

13. Tony Buzon, Use Both Sides of Your Brain, Plume, 1991.

14. Karl H Vesper, New venture strategies.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1496217

15. Saras Sarasvathy, what is effectuation?
http://www.effectuation.org/sites/default/files/documents/effectuation-3-pager.pdf

Units Topics

1 Creativity & Concepts:

Making a case for creativity; creative thinking as a skill; Valuing diversity in thinking - Thinking preferences, cognitive biases of creativity.

Creativity styles; Setting the stage for success - Basic philosophy, Having a vision, Setting the right attitude, recognizing and avoiding mental blocks, Avoiding mindsets, Risk taking, Paradigm shift and paradigm paralysis, Individual and team work; Creativity in problem solving - Problem Definition, Understanding, Representing; Pattern Breaking - Thinking differently, Changing your point of view, Watching for paradigm shift, Challenging conventional wisdom, Lateral thinking, provocation (escape, random word), Mind stimulation: games, brain-twisters and puzzles.

2 (a) Idea and Opportunity:

History of ideas – development of ideas in history (post-it notes, coke bottles); Ideation – Basic of human information processing; Factors influencing ideation - social factors, resources, motivation, context, time; Recognizing Opportunities – how to recognize opportunities; Exploration, evaluation, exploitation, Factors revealing opportunities - alertness, knowledge, luck.

First Internal Examination

2 (b) Defining an opportunity - objective or subjective nature, underlying needs and wants, newness, entrepreneurial strategies of Vesper; Discovery view (building on cognitive

foundations and Scott Shane's material) - sources of opportunities, key correlates with opportunity recognition); Creation view - building on Saras Sarasvathy's effectuation logic, implications on the process.

3 Ideation process:

Idea-collection processes - Brainstorming/Brain-writing, The SCAMPER methods, Metaphoric thinking, Outrageous thinking, Mapping thoughts, Other (new approaches); Using Math and Science - Systematic logical thinking, Using math concepts; Eight-Dimensional (8D) Approach to Ideation - Uniqueness, Dimensionality, Directionality, Consolidation, Segmentation, Modification, Similarity, Experimentation

Second Internal Examination

4 Systematic Inventive Thinking

TRIZ - Fundamentals of TRIZ, Trial and Error and Systematic Innovation, Patents, sources of Technological Innovation; Key finding in TRIZ Patents Research - Level of Invention, Definition of Inventive Problem, Patterns of Technology Evolution, Patterns of Invention; Ideal Final Result (IFR), Psychological Inertia, TRIZ Process, Cause Effect Chains Diagram, Contradictions Matrix, 40 Inventive Principles to resolve technical contradiction

5 Decision and Ownership:

Decision and Evaluation - Focused thinking framework; recognising Reasoned Arguments – short arguments and non arguments; drawing conclusions, inference, or hypothesis; Assumptions - implicit assumptions, underlying assumptions; Reasoning – reasoning, explanations, flaws in reasoning; Six thinking hats; Ethical considerations.

Intellectual Property - Introduction to intellectual property rights- Patents, Copyrights □ , Trademarks □ , Trade Secret, Unfair Competition.

Final Examination