

Innovators by Design: Becoming a Innovator Worth Following

Course Syllabus Term D

COURSE INSTRUCTOR:

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Course Description:

The term innovation seems to be a top priority for most organizations today. The CJCS and CSAF have made remarks concerning how we need to be innovation within our services and the DoD. But what does it mean to innovate, and how do we make it happen? Through the readings and class discussion we will look at a framework to explain how different kinds of thinkers and leaders can create constructive conflict, channel it and develop something completely new.

EVALUATION INSTRUMENTS:

1. Elevator Pitch – 25%
2. Case Study – 35%, 4-6p
3. Course Project – 40%, 6p

Required Readings:

1. Jeff DeGraff, *The Innovation Code: The Creative Power of Constructive Conflict*, (Oakland, CA, BK Publishers Inc) ISBN-10: 1523084766 (160 pages) Book
2. Jason W. Womack, Jodi Womack *Get Momentum: How to Start When You're Stuck*, (Hoboken, NJ, Wiley; 2016) ISBN-10: 1119180260 (120 pages) Book
3. Pisano, Gary P, *You Need an Innovation Strategy*
4. Anthony, Scott D, and Duncan, David S, *Build an Innovation Engine in 90 Days*
5. Hammel, Gary, *Moon Shots for Management*
6. Bechman, Sara and Barry Michael, *Innovation as a Learning Process: Embedding Design Thinking*
7. Brown, Tim, *Design Thinking*
8. DeGraff, Jeff, *Mastering the Five Levels of Creativity* – PDF
9. Boudreau, Kevin J., and Lakhani, Karin, *Using the Crowd as an Innovation Partner*
10. Elsback, Kimberly D., Brown-Saracino, Brooke, and Flynn, Francis J., *Managing Yourself: Collaborating with Creative Peers*
11. Amabile, Teresa, M., Khaire, Mukti – *Creativity and the Role of the Leaders*
12. Kim, W. Chan, and Mauborgne, Renee – *Blue Ocean Strategy* (optional)
13. Wessel, Maxwell, and Christensen, Clayton M., - *Surviving Disruptions*
14. DeGraff, Jeff – *The Seven Deadly Sins of Innovation Leader* – PDF
15. Kanter, Rosabeth Moss, - *Innovation: The Classic Traps*

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16. Sawhney, Mohanbir, Wolcott, Robert C., and Arroniz, Inigo - *The 12 Different Ways for Companies to Innovate*
17. Birkinshaw, Julian, and Bouquet, Cyril, - *The 5 Myths of Innovation*
18. Prahalad, C.K., Mashelkar, R.A., - *Innovation's Holy Grail*

Guest Speakers

Dr Jeff DeGraff: an American professor, professional speaker, author, and consultant. He is known for his contribution and development work on the *Competing Values Framework*,¹ a model about understanding how to appreciate conflicting values and integrate them successfully so that an organization is open to collaboration and growth. He is a consultant to executive teams at [Fortune 500](#) companies, assessing the company's capabilities around innovation and their prospects of growing the business. DeGraff is also a professor at the Ross School of Business at the [University of Michigan](#), where he teaches undergraduate, MBA, and executive MBA classes on innovation, as well as numerous executive education classes on competency and culture development, practices and methods, and leadership.

Col Jason Combs, USAF ret: is a command pilot with more than 2,000 flight hours, with more than 400 combat hours. He served as the commander of the 7th Operations Group, Dyess Air Force Base, Texas. Jason currently works with MD5: Established in 2015 and based at Fort McNair in Washington, DC, MD5 is a Department of Defense (DoD) entity under Manufacturing and Industrial Base Policy, and a network of national research universities that seeks to reinvigorate civil-military technology collaboration and value creation through the development of a National Security Innovation Corps – entrepreneurs and intrapreneurs solving high tech problems in the interest of national security.

Jason Womack: An author, executive coach, husband, nationally ranked triathlete and life-long learner, Jason helps his clients reach higher levels of success. His title: Workplace Performance Psychologist. He meets you where you are and coaches you to reach your very best...at work, and in life.

His compassion and empathy (two words not often used in productivity coaching) are immense and those attributes help to propel those he works with to new heights with little resistance and maximum effectiveness. Jason understands that each of us plays many roles such as: leader, partner, spouse, son, friend, community volunteer, athlete. To succeed requires a core set of practical and actionable skills that can be learned with a bit of direction, motivation and support. He is the CEO of The Womack Company and Cofounder of The Get Momentum Leadership Academy. He advises leaders worldwide, helping leaders work effectively so they have the time, energy and focus to achieve more in work and in life.

Susan Reed: founder and CEO of EdgeDweller, she opens the door to front-end innovation practices that are powerful, practical and proven. She and her team have helped companies achieve above-average performance in revenues, margin and mission by creating game changing solutions, teaching transformational leadership skills to executives and high potentials, and building innovation capacity at the organizational level.

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Her clients have ranged from start-ups to Fortune 50s including Disney, GE, Planet Smoothie, Goodwill, Cox, Wells Fargo, Herman Miller, Trane and many others. Her franchise experience spans multiple industries such as staffing services, real estate, fast food, environmental services, childcare and healthcare.

LtCol Mark Jacobsen, PhD, USAF: An Air Force leader and strategist with a focus on the Middle East. Mark is an instructor pilot in the C-17A Globemaster III and has led airlift operations at the Squadron level. As an Olmsted scholar, he earned a Master's degree in Conflict Management in Amman, Jordan and spent time in most countries in the region. He is a graduate of the Air Force's School of Advanced Air & Space Studies (SAASS), the Air Force's premier institution for training strategists, and a Political Science PhD from Stanford University. He is fluent in Modern Standard Arabic and Levantine Arabic. He has served on the founding board of the Defense Entrepreneurs Forum, and am the former Executive Director of Uplift Aeronautics and currently works with DIUx in Silicon Valley

Dr Neil Stott: Is the Co-Director of the Cambridge Centre for Social Innovation, Director of the Masters in Social Innovation Programme and Senior Faculty in Management Practice at the Cambridge Judge Business School. Dr Stott was Chief Executive of Keystone Development Trust for 13 years. Keystone is one of the largest development trusts in the U.K. delivering, community development, social enterprises and property development (commercial, community and housing).

Dr Stott graduated from Bradford University with a BA (Hons) in Peace Studies (1983). More recently completed a Post Graduate Certificate in Sociology at Anglia Ruskin University in 2003, a Masters in Community Enterprise at the Judge Business School, University of Cambridge in 2005 and a Doctorate in Professional Studies by Public Works at Middlesex University in 2012.

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LESSONS: *(first week is our missed date)*

EL 1—28 March 2018: Introduction. Guest Dr Jeff Degraff

Lesson Description: Assessment and Assignment : This module shows you the four fundamental innovation styles you and your organization use and serves as a building block for all the modules to come. It will explain what innovation is and is not. Additionally, it will show you the Innovation Genome (iGenome) and how to use it to understand innovation.

By identifying and analyzing four different types of innovation, the iGenome assessment helps you understand how you can use the tension between these competing forces—like the simultaneous pursuit of standardization and customization—to create positive movement.

After this lesson, you should be able to:

- Identify the four types of innovation in organizations and your community, including your colleagues and family members
- Assess your own strengths and weaknesses as a leader and member of your organization and community
- Communicate and work effectively with people who are different than you are
- Create the constructive conflicts needed for meaningful innovation.

Reading:

1. “Innovation Code: The Creative Power of Constructive Conflict” book Chapter 1 and 2
2. “You Need an Innovation Strategy” by Gary P. Pisano, *Harvard Business Review*, June 2015
3. “Moon Shots for Management,” by Gary Hamel, *Harvard Business Review*, February 2009

Due Out: Take Assessment:

<http://innv.at/O-Assess>

EL 2—4 April 2018: Creative Thinking and Jumpstarting Innovation: Jason Combs, MD5

Lesson Description: Many studies have found that creativity is one of the attributes of a successful leader and that creativity can be taught, up to a certain level. The studies have also found that the most intelligent people are not necessarily the most creative. Some theories suggest that it is perhaps because very intelligent people do not usually fail and thus hardly need to consider creative solutions. Failure is a very important part of our learning cycle. Leaders need to allow for failure in a limited context to develop innovators in the organization. Instead of avoiding failure, accelerate it.

After this lesson, you should be able to:

- Identify the five levels of creativity and use them to brainstorm ideas
- Understand when to use and not to use divergent and convergent techniques
- Identify and use various creativity tools and methods
- Evaluate and choose winning ideas by examining payoff and risk

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Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 3
2. "Innovation as a Learning Process: Embedding Design Thinking," by Sara Beckman and Michael Barry, *California Management Review*, Fall 2007
3. "Design Thinking," by Tim Brown Harvard Business Review, June 2008
4. "Mastering the Five Levels of Creativity," by Jeff DeGraff

Due Out: Topic of group project is due

EL 3—6 April 2018: Opportunity Finding / Problem Scoping: Bill DeMarco and Maj Blake Pierce

Lesson Description: Innovation often happens when and where you least expect it. This is why you need to constantly look around yourself for **new sources of innovation**. The first step in the Creativize Process is to Set High-Quality Targets. In order to set the best targets for your organization, you need to develop an innovative mindset.

After this lesson, you should be able to:

- Find different sources of innovation, even nontraditional ones in your community
- Identify various points where you can find opportunities to innovate
- Recognize different types of collaborative innovation models and choose the one most suitable for you
- Understand the strengths and weaknesses of collaborative innovation
- Establish the right practices to successfully facilitate collaborative innovation
- Find and interpret reliable sources for anticipating the future (watch the weather)
- Identify current and upcoming opportunities
- Select and refine your high-quality targets
- Create an action plan for hitting your targets

Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 4
2. "How to Manage Outside Innovation," by Kevin J. Boudreau and Karim R. Lakhani, *Sloan Management Review*, Summer 2009

Due Out: Prepare elevator pitch
Work on background research for your project

EL 4—11 April 2018: Get Momentum: How to Be an Innovative Leader: Jason Womack

Lesson Description: The innovative leader must nurture a powerful imagination and excellent communications skills. Be a leader who assembles teams and understands how to encourage and support divergent thought to achieve superior outcomes. Embrace diverse thinking and backgrounds to connect dots and get the best outcomes from your resources.

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Learn to build a workplace of continuous improvement and innovation.

After this lesson, you will better understand:

- The VALUE of people thinking differently about the problems you face.
- The IMPORTANCE of clarifying the vision of how you see the future.
- The SIGNIFICANCE of understanding the impact of knowing peoples' motivation and inspiration.
- The IMPACT of creating an environment that supports innovative thinking

Reading:

1. Get Momentum (Book) Chapter 3 & 4: MOTIVATION and MENTORS
2. Get Momentum Course Work: How to Be an Innovative Leader

Due Out: Time keeping exercise - What are you willing to give up?
Continue to work on background research for your project

EL 5— 18 April 2018: Team Building: Bill DeMarco and Maj Blake Pierce

Lesson Description: The second step in the Creativize Process is to Enlist Deep and Diverse Domain Expertise. This is about finding the people who can fill in your blind spots and help you with the things you don't know now.

After this lesson, you should be able to:

- Identify strengths and weaknesses of each innovation type and how to navigate through them
- Determine what kind of skills and people you need in your organization or team and their respective roles
- Decide what kind of team you need and how you can form one
- Assess your own skills: what you are unique at and what you are not so good at and how you can best contribute to your team

Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 5
2. "Managing Yourself: Collaborating with Creative Peers" by Kimberly D. Elsbach, Brooke Brown-Saracino, and Francis J. Flynn, *Harvard Business Review*, October 2015
3. "Creativity and the Role of the Leaders" by Teresa M. Amabile and Mukti Khaire, *Harvard Business Review*, October 2008

Due Out: Case Studies Due

EL 6— 25 April 2018: EdgeDweller— Guest Susan Reed, CEO EdgeDweller

Lesson Description: Intentional Innovation, Faster Decisions, Lower Risks, Higher

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Performance . Susan will visit and discuss topics like: How much innovation do you really need? What holds you back? EdgeDweller begins by assessing your innovation needs as well your organization's ability to move forward. Driven by common language, consensus building, and proven process, EdgeDweller can install, repair, or replace existing innovation process with customized solutions that will move your organization from consensus building to implementation. Again, and again.

After this lesson, you should be able to:

- EdgeDweller's process
- How EdgeDweller works with corporate entities
- Innovation Processes

EL 7—2 May 2018: How to Win a Bar Fight: Bill DeMarco and Maj Blake Pierce

Lesson Description: You can't achieve your innovation without the help of sponsors who will turn your ideas into a reality. This lesson will teach you the techniques of finding and enrolling those crucial sponsors.

After this lesson, you should be able to:

- Pick the right sponsor
- Differentiate various stakeholders in your organization
- Identify the roles you need each stakeholder to play
- Use different communication strategies to enroll your stakeholders
- Understand the best way to communicate with each stakeholder

Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 7
2. "Surviving Disruptions," by Maxwell Wessel and Clayton M. Christensen, *Harvard Business Review*, December 2012
3. "The Seven Deadly Sins of Innovation Leader," by Jeff DeGraff
4. "Innovation: The Classic Traps," by Rosabeth Moss Kanter, *Harvard Business Review*, November 2006

Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 8

Due Out: NA

EL 8—9 May 2018: DIUx and DoD Innovation— Guest LtCol Mark Jacobson, DIUx

Lesson Description: The Defense Innovation Unit Experimental is accelerating commercial innovation for national defense. DIUx focuses on five portfolio areas.

After this lesson, you should better understand:

- The mission and environment of DIUx and their five focus areas;
- Artificial Intelligence: Leveraging artificial intelligence and machine learning for operational

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impact

- Autonomy: Adopting and countering autonomous systems, with a focus on human-machine interaction and scalable teaming
- Human Systems: Countering emerging biological threats while enhancing survivability, training, biomedical protection, and performance.
- Information Technology: Making combat information open and accessible for operational forces
- Space: Developing on-demand access to space, persistent satellite capabilities, and broadband space data transfer

Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 9
2. "The 12 Different Ways for Companies to Innovate," by Mohanbir Sawhney, Robert C. Wolcott, and Inigo Arroniz, *Sloan Management Review*, Spring 2006.

Due Out: NA

EL 9—16 May 2018: Cambridge University, Judge Business School and Social Innovation: Guest Dr Neil Stott

Lesson Description: Dr Stott will discuss the theory and history of social change, innovation and ventures. The social innovators at JBS critique ideas from sociology, political science and organizational behavior in order to build a deep knowledge and understanding of different forms of social and organizational change.

After this lesson, you better understand:

- How to approach social change and innovation
- Theoretical perspectives of social change and innovation
- Theory and practice of social entrepreneurship, intrapreneurship and extrapreneurship
- Case studies in social innovation and ventures (corporate, public and social).

Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 10
2. Something from CJBS

Due Out: NA

EL 10—23 May 2018: In Class Presentations: Putting it all Together and Final Projects:

Lesson Description: Tricks of the trade to help innovation happen in your organization.

After this lesson, you should be able to:

Explain some innovation principles and "tricks of the trade" to other people in your organization

Sync up your innovation project

Consider how you would start to enact change in your organization and put together an action plan

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Reading:

1. "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 11
2. "Innovation's Holy Grail," by C.K. Prahalad and R.A. Mashelkar, Harvard Business Review, July-August 2010

Due Out: Final Project Pitch and Paper Due

Reading:

- 1: "Innovation Code: The Creative Power of Constructive Conflict" book Chapter 11 – 22p
- 2: "Innovation's Holy Grail," by C.K. Prahalad and R.A. Mashelkar, Harvard Business Review, July-August 2010 – 10p

Due Out: Final Project Pitch and Paper Due

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Topic for Innovation Project/Challenge

- Submit your topic in Week 2
- There are two options/approaches you can take with your project:
 - Option 1: *Organizational innovation challenge***
Objective: Identify, frame, and diagnose an organization's current innovation practices and challenge. Develop real innovative and creative solutions.
 - Option 2: *New market venture***
Objective: Identify unmet needs in the market and develop a business plan for a new market venture.
- Pick an area that is familiar to you or at least one of your teammates. Don't pick an area you know nothing about.
- The best projects are the ones you are personally invested in. Pick a challenge from work – either a problem that your unit is experiencing or a project that you have always wanted to do. You will spend quite a bit of time working on your project. Make sure it counts.
- As a part of the project, you will need to do some research (market, company, etc.) and interview key stakeholders. Pick a project where you can have access to honest conversations with the key stakeholders.
- Your challenge needs to be solvable. Don't pick something that is beyond your ability to change. However, make sure that your challenge is strategic, meaningful and impactful.
- If the challenge has a large scope, break it down to some smaller components. Pick a challenge you can complete in 6-12 months.

Prepare an Elevator Pitch

- Create a preliminary elevator pitch (20 to 30 seconds).
- Submit and deliver the pitch on Week 3.
- Practice first and ask for feedback from those around you. This link has good tips: <https://www.inc.com/geoffrey-james/how-to-give-a-flawless-elevator-pitch.html>.

Time Keeping Exercise

- To innovate, you need room in your life for new practices. You should stop doing some things before starting something new. For a week, keep track of your daily schedule in a spreadsheet, including all mundane activities.

What Are You Willing to Give Up?

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- After keeping track of your time for a week, decide how you can make space for innovation in your life. You need time to complete your project. Can you give up some sleep to get up earlier during the day? Can you give up some leisure time like surfing the Internet? Decide how you can create new habits that allow you to work on your project.
- Continue to adjust your plan as you move along with your project.

Case Study

- You need to complete an analysis of the current situation behind your innovation challenge by week 5 to allow enough time for you to craft and try different solutions.
- **Option 1:** Organization innovation challenge
Objective: Succinctly examine factors that will enable and constraint the organization's ability to effectively address the innovation challenge.
- **Option 2:** New market venture
Objective: Identify gaps in the market and find your opportunity spot through different analyses such as: need and market analysis, competitor analysis, and core competency analysis.
- Use the Innovation Genome framework and other tools and methods (such as SWOT, Push Pull and Clash, etc.) to analyze the challenge.
- Frame the challenge in terms of its strategic importance or value to the organization. If you are doing a new market venture, put forth an argument for why this need is important.
- Only focus on the factors and practices that impact the success or failure of the organization in answering the challenge. Do not include irrelevant information.
- You can choose to create a short presentation that you can share during class time or submit a short paper.
- Be clear and succinct.
- You will receive detailed feedback to help you move forward.