

Dec-Feb, 2016-17

CINE: Understanding Creativity, Innovation, Knowledge Networks And Entrepreneurship

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A significant transition is taking place in India from entitlement to entrepreneurial approach for development. Both economic and social enterprises will come to play a predominant role in addressing the unmet social needs around the world. The deepening of democratic processes is unleashing the social aspirations, which in many cases cannot be met either by the state or the market adequately. In such cases, new hybrid forms of organisations are bound to emerge. It is generally believed that if markets have to expand, state may have to contract. However, the experience of last few decades in India and many other developing countries and some of the developed countries as well shows that financial support from private sector at an early stage when even proof of concept may not exist is extremely difficult. The role of state thus becomes important. When the Honey Bee Network moved from micro finance to micro venture innovation finance [MVIF], the support came from the state. Most angel funds and venture funds invest much later in the life of an enterprise. By then, 80 – 90 per cent mortality of startups ideas may have taken place. This course will try to generate alternative perspective, both in theory and practice for tapping the creative and entrepreneurial spirit of our society.

Creativity requires freedom to think, flexibility to act and functioning beyond boundaries¹. Management of creative processes often is constrained by the limits of norms, rules, roles and resources. One has to tune the structure of governance, trigger the processes of accountability and support grassroots and also top down initiatives. Creativity does not necessarily always lead to innovation. But sometimes, it does. Nurturing creativity requires tolerance for *deviance, dissent and diversity*. The

¹You can also kill creativity very easily, the ten killers often mentioned are: 1) *Always pretend to know more than everybody around*, 2) *Get employees to fill in time sheets.*, 3) *Run daily checks on progress of everyone's work.*, 4) *Ensure that highly qualified people do mundane work for long periods.*, 5) *Put barriers up between departments.* 6) *Don't speak personally to employees, except when announcing increased targets, shortened deadlines and tightened cost restraints.* 7) *Ask for a 200-page document to justify every new idea.* 8) *Call lots of meetings.* 9) *Place the biggest emphasis on the budget and* 10) *Buy lots of computers.*, source:

http://www.1000advices.com/guru/organization_10ways2murder.html downloaded on December 15, 2010

organisational culture, which encourages creative ways of solving problems, also accommodates planned failures. *Courting uncertainty becomes a mantra, marrying meandering with spontaneity becomes the style.* Very few innovative technologies or processes succeed in the market place. And yet, in the absence of a precise predictive test, one has to try many approaches knowing fully well that only a few will survive. Innovations need not necessarily take place in the same way at all the levels in the organisation or among the clients or users. There is a widespread interest in the *user-driven* as distinct from *user – innovations* (von Hippel, 2010) that influence the organisational choices. However, the open innovation movement begun by the Honey Bee Network 25 years ago has become a mainstream movement today. Which users/or non-users are involved in triggering which kind of innovations also depends upon the values underlying the motivations of innovators and/or firms or other collaborative platforms.

In this course, we will explore and understand the relationship between individual, institutional and societal creativity in coping with risks and uncertainties, overcoming various environmental challenges as a part of circular economy for designing the futures. The innovations need not always diffuse within or outside the organization. The incentives for developing innovations that diffuse widely may not be very difficult to design. But incentives for developing innovations that enable people in limited locations, specific situations with or without handicaps are more difficult to design. The intrinsic motivations (*swantayhsukhay*) often outweigh the extrinsic motivations for innovations. Identifying the right blend of both is a challenge that leaders have to face.

The *Long Tail of Innovations* (Anderson, 2006)² is an important characteristic of innovation eco-system. That is, a large number of innovations are suitable for small niches and thus may diffuse very locally or in a limited way, but they make place for a few which diffuse widely. The *long nose of innovation* (Buxton, 2008) on the other hand implies a long wait before a major breakthrough occurs. The computer mouse took thirty years to become popular after its discovery in the sixties.

²http://issuu.com/david.dencker/docs/the_long_tail_innovation_model, also see a thesis on the concept, David Dencker, 2008, downloaded on Dec 15, 2010

Knowledge of the processes that trigger creativity and innovation in some situations more easily than others, is available more often with those who can break rules, or have capacity for dissenting and transforming the context. One reason many companies are seeking solutions (crowdsourcing or mass-sourcing ideas³) from outside is that too much of congruence with in internal R and D has led to lesser diversity and thus lower levels of creativity. Why would dissenters share their knowledge with others? This knowledge could be tacit or explicit, episodic or concurrent, transient or stable and isolated or networked. Too much of connectedness in an organisation or a society may prevent the minimum isolation that is necessary for innovative ideas to emerge, grow and get institutionalised or go forward.. It is true, however, that not all innovative ideas need to get institutionalised. Social Networking may be good for very many purposes but it seldom helps in triggering creative ideas and getting traction for large-scale missions (Iranian elections or Tunisian revolution were exceptions, were they?). Also see⁴ graphic discussion on how women in Africa have struggled against various kind of injustice by harnessing aesthetics of dissent and alienation.

Knowledge networks reflect the way ideas flow among those who share common concerns even if they lack the consensus about the way these concerns should be articulated. But these networks need to continuously discover strangers from outside the network whose skills and perspective are needed. They shouldn't have strong gatekeepers who often behave like a third/second class railway compartment inmate (as long as one is outside, you wish to get in, but once you are in, you want to keep others out). The divergence of perspectives facilitates the creation of knowledge networks. Societal norms and culture facilitate the creation of these networks in some situations and inhibit the same in other situations. Indian society has demonstrated different processes through which knowledge networks have emerged at different points of time in history around specific technological and institutional challenges. In the wake of globalisation, new ways of creating networks and managing knowledge

³see, Barry L Bayus, 2013, Crowdsourcing New Product Ideas over Time: An Analysis of the Dell IdeaStorm Community, *Management Science* 59(1), pp. 226–244, <http://public.kenan-flagler.unc.edu/faculty/bayusb/WebPage/Papers/Crowdsourcing.pdf>

⁴ JUDE G. AKUDINOBI, 2006, Durable Dreams: Dissent, Critique, and Creativity in FaatKine' and Moolaade, *Meridians: feminism, race, transnationalism* 2006, vol. 6, no. 2, pp. 177-194; also platforms like <https://www.saddahaq.com/login> are emerging to harness dissent in public spaces.

have to be discovered. Entrepreneurial ventures without appropriate knowledge networks are unlikely to ever succeed.

The relationship between natural, social, ethical and intellectual capital lays the ground for entrepreneurship of different kinds to emerge. Social innovations/entrepreneurship may provide legitimacy for creating a safety net that helps budding economic entrepreneurs. Too much emphasis on individual innovations and entrepreneurship may in due course, dilute the pressure for creating social communities that share knowledge, provide support and nurture creativity. The time has come to look at a range of entrepreneurial forms, such as conventional individual led start-ups, cooperative ventures, network enterprises, cooperative/s of entrepreneurs, commonly owned enterprise to serve member entrepreneurs (e.g. micromatic machine tools), fluid enterprise (episodic like matrix companies, embedded enterprises (like *living-in* partners may be) pay-as-you-wish business models, pay-if-earning assured (energy audit start-ups being paid a part of the savings they ensure) and new services models creating benchmarks and standards for industries to trigger innovations, horizontal supply chains as against conventional vertical ones, supply chain based incubation of vendors/manufacturers etc. Cultural enterprises/cooperatives/agencies may create markets for folk artists, authors, performers, sculptors etc.

There is a revolution waiting to happen in the entrepreneurial space. This course intends to break new ground by fertilizing imagination, challenging dogmatic comfort, celebrating irreverence through performance rather than promise. *Get good grades by creating small or big miracles and social or commercial businesses/platforms and not just by writing business plans (for a pseudo cv point!) or just the project reports which may line the shelves.*

Pedagogy:

The course will encourage participants to look at the knowledge systems from a multi-cultural perspective so that the dynamics of dissent and diversity can be understood properly. The purpose of an innovative organisation or a society is not only to expand

the choices but also elongate the time frame of decision-making. Sustainability is not possible if the time frame is *short* and the decision-making horizon is *narrow*.

The pedagogy of the course will involve encounters with innovators/entrepreneurs at grassroots as well as in high tech sectors, service spaces, cultural economy, and generating businesses through entrepreneurial workshops. But all this will rest completely on the initiatives of students. Lesser you dig deep, lesser surprises you get. *Do we really live the day when we have not been surprised?*

(Profile)

Each participant will interview and write the story of a social, economic, institutional or policy linked enterprise in India or abroad which involves significant creative element and innovative approach. Such profiles will require pooling of the background information interview with the entrepreneur and the team members and in case some clients have already been served, then interaction with them. We should also look at other models in the same domain and try to identify the distinctive features of each. There are three sets of audiences for which recommendations must follow: One the entrepreneur, second the policy makers and third the support organisations which provide early stage finance and/or mentoring and logistics.

Funding for young really innovative ideas (sif.sristi.org)

The students are encouraged to set up real innovative companies / ventures for which some seed money will be provided by the faculty/ and or third party students or social investors to trigger real outcomes if needed. Technological innovation based enterprises will be preferred though other social, cultural and economic enterprises based on innovative structures or processes are also welcome. The course will undergo final layout in the hands of participants in the true tradition of user defined and user based innovation models. All projects and reviews will be put up on the CINE blog <http://cineiima.blogspot.com/> or a new site can be created by the course participants.

(Projects)

Those students who do not want to set up entrepreneurial ventures can either take up a project highlighting unusual aspects of creativity, innovations or public policies or private initiatives for supporting startups in different parts of the world.

Each participant will also create at least five to ten pages of open source content, list of useful links, animations (inRSA style) or any other useful resource for budding change agents, social or economic entrepreneurs on a collaborative platform (*Design for online sanctuary for innovations*). Specific chapters or sections of different books will be suggested in class. Some of the readings will make more sense after the class.

Evaluation:

Review of books/paper/films [Last date: January 25, 2016]	20
Profile of the startup ventures [Last date: February 18, 2016]	40
Entrepreneurial ventures/projects [Last date: February 26, 2016]	40

Final presentation: February 20, 2017

December 23, 2016

Sessions 1-2: 05.40 pm to 08.30pm

Ways of knowing, feeling and doing: designing ventures

samvedana se srijansheelta

We may know *a lot* but may feel only about a *little*. We, of course, then know less. If we *don't do* anything about what we know and feel for, we know *even less*. Inertia can lull our sensibilities, perpetual adaptations may give us a choice of being an amoeba!

Why do we continue to reinforce the culture of compliance, conformity and congruence in our society when creativity and innovations demand dissent, diversity and deviance? How do we learn from four teachers: a teacher within, among each other, common people and the nature? Are there ways in which every day of life becomes a *shodhyatra*, the learning journey? How have different cultures around the world dealt with creative people and innovation mavericks?

The class will set stage for designing ventures, defining markets, forming uncertainty enclosures (*arenas where what cannot be predicted can only be actualized....*), creating sanctuaries for start-ups, challenging the existing limits of entrepreneurial space (e.g. if every fifth child in school who has gone through or is going through depression or schizophrenia or other mental health problems, then why cannot service models for dealing with it be developed for private and government schools. May be some of these kids are the budding entrepreneurs or geniuses). To illustrate, an entrepreneur who wishes to deal with troubled/alienated childhood will then make a pitch.

Action: *Participants will bring examples from their cultural context about dissent, even whistleblowers, creativity and innovation that they have come across. We will also do an exercise to prove that each one of us is capable of being creative and innovative; it is not necessarily an inborn or a special trait. Design framework for developing products, platforms, services and networks will then hopefully evolve.*

Essential Readings:

1. [Anil K Gupta, 2006, Indigenous knowledge: Ways of knowing, feeling and doing: Draft note, http://www.sristi.org/anilg/node/565](http://www.sristi.org/anilg/node/565)
<http://www.sristi.org/anilg/papers/indegenous%20knowledge%20-%20ways%20of%20knowing,%20feeling%20and%20doing.doc>

2. [AbolTabol: The Nonsense World of Sukumar Ray Author: SampurnaChattarji. Illustrated by: Sukumar Ray. Published by Puffin New Delhi, India 2004http://aboltabol.freehostia.com/english.htm](http://aboltabol.freehostia.com/english.htm)

December 27, 2016

Sessions 3-4:05.40 pm to 08.30pm

Guest Faculty

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Persistence of inertia: how do we live with certain technologies and institutions unchanged for millennia and move towards the open innovation model

What are the values underlying the choice of problems/challenges which innovators address? Conversely, why do certain technologies or business processes remain unchanged for very long periods? How do we learn to live with the problems unsolved indefinitely? How do creative entrepreneurs manage planned obsolescence?

How do cultural institutions create tolerance of neglect, exclusion of disadvantaged, story of *eklavya* or downplaying of certain problems faced in society? Loopholes, Hagysuggests make big things possible, http://www.forbes.com/sites/jessicahagy/2012/03/15/loopholing-seeing-the-options-between-the-rules/?utm_campaign=forbestwittersf&utm_source=twitter&utm_medium=social.

Action: *Each participant will identify three or four situations in which deep inertia has persisted whether in our day to day life or in the functioning of organisations and startup ventures. The purpose is to become conscious of the paradoxical tension between autonomy and agency. Autonomy implies freedom to act and agency refers to ability and willingness to act. Sometimes, we have the former and sometimes the latter. But only in a few cases, both converge.*

Essential readings:

1. [Do ado, S., & Ventresca, M. J. \(2013\). Crescive entrepreneurship in complex social problems: Institutional conditions for entrepreneurial engagement. Journal of Business Venturing, 28\(1\), 69–82.r](http://dx.doi.org/10.1016/j.jbusvent.2012.02.002)
<http://dx.doi.org/10.1016/j.jbusvent.2012.02.002> [accessed on Dec 10, 2014]
2. [Dunne, D. D., & Dougherty, D. \(2012\). Chapter 22 - Organizing for Change. Innovation, and Creativity. In M. D. B. T.-H. of O. C. Mumford \(Ed.\), \(pp. 569–](#)

583). San Diego: Academic Press. <http://dx.doi.org/10.1016/B978-0-12-374714-3.00022-7>[accessed on Dec 10, 2014]

3. [D'Este, P., Iammarino, S., Savona, M., & von Tunzelmann, N. \(2012\). What hampers innovation? Revealed barriers versus deterring barriers. *Research Policy*, 41\(2\), 482-488.](#)

December 28, 2016

Session 5-6: 05.40 pm to 08.30pm

Understanding the barriers to innovation and change.

Inventory of things, processes and structures, which are in need of urgent innovations: an inventory of technical, cultural, institutional inertia, but keep the obvious ones out. How do we avoid learning to be helpless? Identify the major drivers of entrepreneurial mind that help to overcome these barriers with alacrity.

Action: *Identify the difficulties faced by the startup entrepreneurs and/or managers in organizations who have tried to bring about innovative solutions to various problems. In a group of two – three students, shared presentations may be made for three to four minutes on these barriers. It will be ideal if these are filled up in a spreadsheet so that those which have already been identified are not repeated unless there is a difference in the context, scale, domain or the severity of the hurdle. These hurdles can also be drawn from the profiles that students are developing of various startup ventures. The examples of entrepreneurial approaches may also be included.*

Essential Readings:

1. [Davies, W. \(2012\). Chapter 8 - Climate, Creativity and Competition: Evaluating the Neanderthal "glass ceiling." In S. E. B. T.-D.in Q. Sciences \(Ed.\), *Origins of Human Innovation and Creativity* \(Vol. Volume 16, pp. 103-128\). Elsevier.doi:<http://dx.doi.org/10.1016/B978-0-444-53821-5.00008-7>](#)
2. [Göran Ahrne & Apostolis Papakostas, 2001, *Inertia and Innovation*, Stockholm Center for Organizational Research](#), Stockholm<http://www.mngt.waikato.ac.nz/ejrot/cmsconference/2001/Papers/Change%20and%20Organisation/Ahrne.pdf>
3. [Linus Dahlander, David M. Gann \(2010\) How open is innovation? *Research Policy*, Vol. 39, 699-790](#)

January 2, 2017

Session 7-8: 05.40 pm to 08.30pm

Encounter with innovation-based entrepreneurs.

The institutional context of individual creativity and innovation besides lessons from green enterprises. The participants may select some of the promising technologies from NIF/Honey Bee data base/Inventors of India workshop database or elsewhere and develop synoptic business plans, after doing market research, Prior Art Search using patent (M-cam.com) and non-patent data base. Or one can also try to seek entrepreneurial and licensing opportunities for these innovators.

Action: *Groups will develop incubation plans for some innovations by students or grassroots innovators. Some groups will create prototypes of online collaborative platform for innovation design, implementation, market testing, and customer insight and user involvement in redesign. The class participants may also invite some of the creative entrepreneurs to skype presentation or in person presentation.*

The outcome:*[a]The finalized synopsis of start-ups in which one can be a trigger, manager, owner, investor, partner, or a service provider, designer or ethical evangelist etc. [b] Those who are not working on their own start-ups or are not planning to work with startups can share the synopsis of the entrepreneurs profile they are developing.*

Essential Readings:

1. [Grant & Berry \(2011\) The Necessity of Others is the Mother of Invention: Intrinsic And Prosocial Motivations, Perspective Taking, And Creativity, Academy of Management Journal](http://www.selfdeterminationtheory.org/SDT/documents/2011_GrantBerry_AM.pdf)
http://www.selfdeterminationtheory.org/SDT/documents/2011_GrantBerry_AM.pdf
2. [Hsiao, S.-W., & Chou, J.-R. \(2004\). A creativity-based design process for innovative product design. International Journal of Industrial Ergonomics, 34\(5\), 421-443.](http://dx.doi.org/10.1016/j.ergon.2004.05.005)
doi: <http://dx.doi.org/10.1016/j.ergon.2004.05.005>

3. [Kuhn, S. L. \(2012\). Chapter 6 - Emergent Patterns of Creativity and Innovation in Early Technologies. In S. E. B. T.-D. in Q. Sciences \(Ed.\), Origins of Human Innovation and Creativity \(Vol. Volume 16, pp. 69–87\). Elsevier.](http://www.insiteproject.org/wp-content/uploads/2013/03/Kuhn-creativity-volume.pdf)
<http://www.insiteproject.org/wp-content/uploads/2013/03/Kuhn-creativity-volume.pdf>

January 9, 2017

Sessions 9-10: 05.40 pm to 08.30pm

Organising frugal logistics/supply chain for start-ups

Each group will present creative examples of reverse logistics, horizontal supply chain, ethical parameters for evaluating supply chain, imaginative use of ICTs including mobile apps for managing supply chain for startups, understanding the users' needs and bringing design thinking for achieving frugality in supply chain management. In the earlier years, several examples were discussed including that of Narayan Hrudayalaya, which achieved world class benchmarks in heart surgery at extraordinarily low cost by asking different questions. For instance, Dr. Devi Shetty asked how many of the patients used air conditioners at home. Further, does air conditioned room or ward facilitate early recovery? The answer was obvious. Majority of the lower middle class patients didn't use the air conditioners and the healing was not facilitated by the use of air conditioners either. In a 500-bed hospital, except operation theatre and intensive care unit [ICU], rest of the hospital was non air-conditioned. The cost came down drastically, so also the hospital induced infection rate. The participants should search for such outstanding examples of frugality in design and logistics management.

Suggested readings:

1. [Cardoso, S. R., Barbosa-Póvoa, A. P. F. D., & Relvas, S. \(2012\). Designing and planning of closed-loop supply chains for risk and economical optimization. In B. Ian David Lockhart & F. Michael \(Eds.\), Computer Aided Chemical Engineering \(Vol. Volume 30, pp. 447-451\): Elsevier](#)
2. [Sharma, A., & Iyer, G. R. \(2012\). Resource-constrained product development: Implications for green marketing and green supply chains. Industrial Marketing Management, 41\(4\), 599-608.](http://www.sciencedirect.com/science/article/pii/S0019850112000909)
<http://www.sciencedirect.com/science/article/pii/S0019850112000909>[accessed on Dec 10, 2014]

3. [Berman, B. \(2015\). How to compete effectively against low-cost competitors. Business Horizons, 58\(1\), 87-97.](#)

January 11, 2017

Sessions 11-12: 05.40 pm to 08.30pm

Visit to a grassroots innovator: Pareshbhai Kasturbhai Panchal - Incense stick making machine / Vijaybhai Solanki - Cotton wick making machine / panel discussion

A half day visit if full day visit not possible, is planned to understand the various stages of a startup beginning with lot of failures and debts to about a million dollar worth assets in seven years. We will also invite some other professional innovators and entrepreneurs from nearby clusters to share their experience in dealing with market, technological and institutional uncertainties. Alternatively, we can have a panel discussion with some of the budding startups nominated by the class participants.

***Action:** The participants will study the background information of his enterprise and look at all the dimensions of enterprise evolution and development of network. They will also identify nascent opportunities for unfolding entrepreneurial potential of a stress prone rural economy. They will have a chance to interact with villagers in different occupational groups to identify the gaps in the innovation eco system. If possible, they will also visit an industrial cluster and interact with technology based entrepreneurs.*

January 16, 2017

Sessions 13-14: 05.40 pm to 08.30pm

Lessons from the lives of green frugal innovators

Lessons based on the experience of individual innovators at different levels in the society, about how they link their ideas, innovations and institutional choices? We will also discuss cases of grassroots innovators as well as those with professional background discovered through four Inventors of India workshops (1998-2008).

Can one become more creative through certain exercises and explorations? How do we link individual motivations with triggers, which may lead to taking initiatives, some of which may eventually become innovations? How do we factor in the feedback of users (both potential and actual) in the process? What do we learn from the innovative potential of workers in and around the periphery of firms and farms?

Action: *Each participant will bring some examples of shop floor innovation, intra-preneurship, present examples of frugal and green business models. We can also plan a workshop or a panel discussion among some of the frugal innovators.*

Essential Readings:

1. Pansera, M., & Owen, R. (2014). Eco-Innovation at the “Bottom of the Pyramid”. In *Collaboration for Sustainability and Innovation: A Role For Sustainability Driven by the Global South?* (pp. 293-313). Springer Netherlands.
2. [Obschonka, M., Andersson, H., Silbereisen, R. K., & Sverke, M. \(2013\). Rule-breaking, crime, and entrepreneurship: A replication and extension study with 37-year longitudinal data. Journal of Vocational Behavior, 83\(3\), 386–396. http://dx.doi.org/10.1016/j.jvb.2013.06.007](http://dx.doi.org/10.1016/j.jvb.2013.06.007)

January 19, 2017

Sessions 15-16: 05.40 pm to 08.30pm

Mothers and daughters of Innovations: Gender issues in entrepreneurship

The insights from the experience of women innovators and entrepreneurs as well as members of various startup ventures will be drawn upon. Are there any specific strategies needed to expand support for more such ventures to come up and succeed.

Action: *Participants will interview the women headed, and/or managed enterprises apart from reviewing the literature and draw lessons from them. Some groups can also look at the importance of given to women's ideas in the companies for intra-preneurship purposes.*

Essential Readings:

1. [Gupta, A. K., & Mashelkar, R. A. \(2005\). Women and formal and informal science., in History of Science, Philosophy and Culture in Indian Civilisation](#)
2. [Most Influential Women in Web 2.0](#)
3. [Stanley,A. \(1995\). Mothers and daughters of invention: Notes for revised history of technology. New Brunswick. Rutgers University Press. \(Full Pdf not available\)](#)

January 20, 2017

Sessions 17-18: 05.40 pm to 08.30pm

Creating Knowledge Networks and alliances for a nurturant Eco-system

There is hardly any start-up, which has not recognised the need for support from knowledge and resource networks. There is a major change taking place in the forms of organisation for surviving in an uncertain world. Just as nature has multi functionality, diversity, frugality, and elegance in its working, the entrepreneurial networks have to have similar qualities. Bio-mimicry has provided useful lessons from nature just as other analogs have done so.

Action: *The participants will bring examples of creative knowledge and resource networks around the world for making innovation eco system nurturant for startups. They will design the strategies for forming or strengthening the multi-layer and multi-market networks for sharing knowledge, resources and ideas for collective growth. The cooperative of entrepreneurs, as an organisational form for generating and reinforcing synergy will also be pursued. The online Sanctuary for in-situ distributed mentoring of green and inclusive innovations will be reviewed in the class.*

Essential readings:

1. [Segers, J. P. \(2015\). The interplay between new technology based firms, strategic alliances and open innovation, within a regional systems of innovation context. The case of the biotechnology cluster in Belgium. Journal of Global Entrepreneurship Research, 5\(1\), 1-17.](#)
2. [Tseng, C.-Y. \(2009\). Technological innovation and knowledge network in Asia: Evidence from comparison of information and communication technologies among six countries. Technological Forecasting and Social Change, 76\(5\), 654–663.](#)
<http://dx.doi.org/10.1016/j.techfore.2008.03.007>
<http://www.sciencedirect.com/science/article/pii/S0040162508000462>

3. [García-Muiña, F. E., Pelechano-Barahona, E., & Navas-López, J. E. \(2009\). Knowledge codification and technological innovation success: Empirical evidence from Spanish biotech companies. Technological Forecasting and Social Change, 76\(1\), 141–153. http://dx.doi.org/10.1016/j.techfore.2008.03.016](http://dx.doi.org/10.1016/j.techfore.2008.03.016)
4. [Proto, A., Tani, S., Bühnemann, J., Gaus, O., & Raith, M. \(2012\). Knowledge Networks and Their Impact on New and Small Firms in Local Economies: The Case Studies of the Autonomous Province of Trento and Magdeburg \(No. 2012/2\). OECD Publishing. http://www.oecd-ilibrary.org/docserver/download/5k9gs1cr080x.pdf?expires=1418638702&id=id&accname=guest&checksum=8869F38F584F41B31E604566FC125CC6](http://www.oecd-ilibrary.org/docserver/download/5k9gs1cr080x.pdf?expires=1418638702&id=id&accname=guest&checksum=8869F38F584F41B31E604566FC125CC6)
5. [Obschonka, M., Andersson, H., Silbereisen, R. K., & Sverke, M. \(2013\). Rule-breaking, crime, and entrepreneurship: A replication and extension study with 37-year longitudinal data. Journal of Vocational Behavior, 83\(3\), 386–396. doi: http://dx.doi.org/10.1016/j.jvb.2013.06.007](http://dx.doi.org/10.1016/j.jvb.2013.06.007)

February 1, 2017

Sessions 19- 20: 05.40 pm to 08.30pm

Designing incentives for innovations: even if they fail

Discussion on monetary and non-monetary incentives for endogenous and exogenous innovation aimed at individuals and groups (Gupta, 1995, 2006). Experience of innovations jury for climate change innovations in Sweden, Tata Innovation Awards, oil sector innovations etc., will be discussed. A model of portfolio of incentives will be debated in the class.

Action: *Participants will bring examples of incentives for innovations, whether monetary or non-monetary; collective or individual. A spreadsheet with monetary and non-monetary incentives for individuals and groups will be circulated to be filled in by February 10, for discussion in the class on February 11.*

Essential readings:

1. [Hellmann, T., & Thiele, V. \(2011\). Incentives and innovation: A multitasking approach. American Economic Journal: Microeconomics, 3\(1\), 78-128.](http://www.sciencedirect.com/science/article/pii/S0048733312000029)
2. [Fu, X. \(2012\). How does openness affect the importance of incentives for innovation? Research Policy, 41\(3\), 512-523. Retrieved 3, 41, from http://www.sciencedirect.com/science/article/pii/S0048733312000029](http://www.sciencedirect.com/science/article/pii/S0048733312000029)
3. [Tahirsylaj, A. S. \(2012\). Stimulating creativity and innovation through Intelligent Fast Failure. Thinking Skills and Creativity, 7\(3\), 265-270. Retrieved 3, 7, from http://www.sciencedirect.com/science/article/pii/S1871187112000442](http://www.sciencedirect.com/science/article/pii/S1871187112000442)

4. [Yanadori, Y., & Cui, V. \(2013\). Creating incentives for innovation? The relationship between pay dispersion in R&D groups and firm innovation performance. Strategic Management Journal, 34\(12\), 1502-1511.](#)

February 2, 2017

Session 21-22: 05.40 pm to 08.30pm

Open Innovation Models for Frugal Innovations

How are corporations trying to take more open approach to seeking ideas from start-ups and other innovators?

Essential Readings:

1. [Eelko K.R.E. Huizing, 2011, Open innovation: State of the art and future perspectives, Technovation, 31, 2-9 \[http://ac.els-cdn.com/S0166497210001100/1-s2.0-S0166497210001100-main.pdf?_tid=73296fea-6de3-11e3-ac25-00000aach35d&acdnat=1388031120_45fac745b0d4f6e92ebf2d0c8ce970e9\]\(http://ac.els-cdn.com/S0166497210001100/1-s2.0-S0166497210001100-main.pdf?_tid=73296fea-6de3-11e3-ac25-00000aach35d&acdnat=1388031120_45fac745b0d4f6e92ebf2d0c8ce970e9\)](#)
2. [Hansen, Erik G. and Grosse-Dunker, Friedrich, Sustainability-Oriented Innovation \(December 19, 2012\). S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta \(Eds.\), Encyclopedia of Corporate Social Responsibility: Heidelberg, Germany: New York: Springer, Forthcoming. Available at SSRN: <http://ssrn.com/abstract=2191679>](#)
3. [Crisp, N. \(2014\). Mutual learning and reverse innovation-where next. *Globalization and health*, 10\(1\), 1-4.](#)
4. [Ramani, S. V., & Mukherjee, V. \(2014\). Can breakthrough innovations serve the poor \(bop\) and create reputational \(CSR\) value? Indian case studies. *Technovation*, 34\(5\), 295-305](#)
<http://www.sciencedirect.com/science/article/pii/S0166497213000758>
5. [West, J., & Bogers, M. \(2013\). Leveraging external sources of innovation: a review of research on open innovation. *Journal of Product Innovation Management*.](#)
<http://ssrn.com/abstract=2195675>

February 20, 2017

Session 23-24: 05.40 pm to 08.30pm

Presentations

Additional references who wish for deeper understanding of any topic:

Suggested readings:

1. [Cass R. Sunstein, Conformity And Dissent, The Law School, The University Of Chicago, 2002](#)
(http://www.law.uchicago.edu/files/files/34.crs_.conformity.pdf accessed on May 15, 2012)
2. [Fleur Diamond, Review: The Outsider. Colin Wilson. \(1956\) London; Phoenix. 2001.](#) <http://diamondsharp.wordpress.com/2011/01/06/review-the-outsider-colin-wilson-1956-london-phoenix-2001/> (accessed on May 15, 2012)

3. [Samkhyā Yoga, the yoga of understanding](http://www.swami-krishnananda.org/bhagavad/bhagavad_03.html) (http://www.swami-krishnananda.org/bhagavad/bhagavad_03.html, downloaded on Aug 9, 2006)
4. [Waddock, S., & Steckler, E. \(2013\). Wisdom, Spirituality, Social Entrepreneurs, and Self-Sustaining Practices: What Can We Learn from Difference Makers?. In Handbook of Faith and Spirituality in the Workplace \(pp. 285-301\). Springer New York.](#)
5. [La Pira, F. \(2011\). Entrepreneurial intuition, an empirical approach. Journal of Management & Marketing Research, 6, 1-22.](#)
6. [Martin, K., & Mirraboopa, B. \(2003\). Ways of knowing, being and doing: A theoretical framework and methods for indigenous and indigenist re-search. Journal of Australian Studies, 27\(76\), 203-214.](#)
7. [Callan, J., Sundin, P., Suffian, S., & Mehta, K. \(2014, October\). Designing sustainable revenue models for CHW-centric entrepreneurial ventures. In Global Humanitarian Technology Conference \(GHTC\), 2014 IEEE \(pp. 687-693\). IEEE.](#)
8. [Brian Martin, 1998, Strategies for Dissenting Scientists, Journal of Scientific Exploration, Vol. 12, No. 4, 1998, pp. 605-616. Also see his work on Varieties of Dissent, 2008, <http://www.uow.edu.au/~bmartin/pubs/08Banks.html>](#)
9. [Interview with Colin Wilson about human potential:](#)
<http://www.wilderdom.com/wilson/>
10. [Shahid Yusuf, From Creativity to Innovation, Technology in Society, 31 \(2009\) 1-8](#)
11. [Kimbell, L. \(2011\). Rethinking design thinking: Part I. Design and Culture, 3\(3\), 285-306.](#)
12. [West, J., & Bogers, M. \(2014\). Leveraging external sources of innovation: a review of research on open innovation. Journal of Product Innovation Management, 31\(4\), 814-831.](#)
13. [Saebi, T., & Foss, N. J. \(2015\). Business models for open innovation: Matching heterogeneous open innovation strategies with business model dimensions. European Management Journal, 33\(3\), 201-213](#)
14. **Hmieleski, K. M., Carr, J. C., & Baron, R. A. (2015). Integrating Discovery and Creation Perspectives of Entrepreneurial Action: The Relative Roles of Founding CEO Human Capital, Social Capital, and Psychological**

Capital in Contexts of Risk Versus Uncertainty. Strategic Entrepreneurship Journal.

15. [Clayton M. Christensen, Heiner Baumann, Rudy Ruggles, and Thomas M. Sadtler, Disruptive Innovation for Social Change, HBR, 2006, 94-101](http://mcadsustainabledesign.com/wp-content/uploads/2011/06/HBR-Christensen-Disruptive-Innovation-Social-Change-2006.pdf) at <http://mcadsustainabledesign.com/wp-content/uploads/2011/06/HBR-Christensen-Disruptive-Innovation-Social-Change-2006.pdf> (accessed on May 15, 2012)
16. [Dorothy Leonard and J. F. Rayport, Spark Innovation through empathic design, Harvard Business Review, 1997, 102-113](http://iic.wiki.fgv.br/file/view/LEONARDO%3BSpark+Innovation...DesignHBRv75i6nov-dec_97.pdf)
http://iic.wiki.fgv.br/file/view/LEONARDO%3BSpark+Innovation...DesignHBRv75i6nov-dec_97.pdf (accessed on May 15, 2012)
17. [Henry W. Chesbrough, The Era of Open Innovation, MIT Sloan Management Review, 2003, 35-41](http://sloanreview.mit.edu/article/the-era-of-open-innovation/)
<http://sloanreview.mit.edu/article/the-era-of-open-innovation/>
18. [Ian Inkster, 2007, Technology in World History Cultures of Constraint and Innovation, Emulation, and Technology Transfers, Comparative Technology Transfer and Society, volume 5, number 2 \(August 2007\): 108-27](#)
19. [Ron Dvir and Edna Pasher, 2004, Innovation engines for knowledge cities: an innovation ecology perspective, Journal of Knowledge Management, 8 \(5\) 16-27](#)
20. [Wieland, T. \(2006, March\). Innovation culture, technology policy and the uses of history. In International ProACT Conference, Innovation Pressure \(pp. 15-17\).](#)
21. [Foxon, T. J. \(2002\). Technological and institutional 'lock-in' as a barrier to sustainable innovation. Imperial College Centre for Policy and Technology Working Paper.](#)
22. [Kimbell, L., &Julier, J. \(2012\). The social design methods menu.](#)
23. [Donnellon, A., & Williams Middleton, K. \(2012\). Beyond the Explicit: excavating a pedagogical approach to knowledge for entrepreneurial action. In European Academy of Management \(EURAM\) Conference, Rotterdam.](#)
24. [Uyarra, E., Edler, J., Garcia-Estevez, J., Georghiou, L., &Yeow, J. \(2014\). Barriers to innovation through public procurement: A supplier perspective. Technovation, 34\(10\), 631-645.](#)
25. [Georghiou, L., Edler, J., Uyarra, E., &Yeow, J. \(2014\). Policy instruments for public procurement of innovation: Choice, design and assessment. Technological Forecasting and Social Change, 86, 1-12.](#)

26. [Janie Curtis, 2013, The Barriers To Innovation, And How To Break Through, Forbes, Oct 4, 2013](#)
<http://www.forbes.com/sites/onmarketing/2013/04/10/the-barriers-to-innovation-and-how-to-break-through/> [accessed on Dec 10, 2014]
27. [Robert Adler, Entering a Dark Age of Innovation, 02 July 2005, NewScientist.com news service,](#)
<http://www.newscientist.com/article.ns?id=dn7616>
 [accessed on Dec 10, 2014]
28. [Ronni Marshak, 2012, Customers want to help you- and themselves- Don't waste it](#)
<http://outsideinnovation.blogs.com/pseybold/organizational-inertia/>
 [accessed on Dec 10, 2014]
29. **Arnold Pacey, 1991, The Technology in World Civilization, MIT Press, Boston.**
30. [Khan, B. Z., & Sokoloff, K. L. \(2004\). Institutions and Technological Innovation During the Early Economic Growth: Evidence from the Great Inventors of the United States, 1790-1930 \(No. w10966\). National Bureau of Economic Research.](#)
31. [Von Hippel, E., & de Jong, J. P. \(2010\). Open, distributed and user-centered: towards a paradigm shift in innovation policy. EIM Research Reports H, 201009.](#)
32. [G. Page West III \(2007\), Collective Cognition: When Entrepreneurial Teams, Not Individuals, Make Decisions, Entrepreneurship Theory and Practice 31 \(1\), 77-102.](#)
33. [Jared Diamond, Guns, Germs and Steel, Vintage, London, 1998, also see summary](#)
<http://www.mcgoodwin.net/pages/gungermsteel.html> (accessed on May 15, 2012)
34. [Dasher, R., Harada, N., Hoshi, T., Kushida, K. E., & Okazaki, T. \(2015\). Institutional Foundations for Innovation-Based Economic Growth.](#)
35. **Raco, J. R., & Tanod, R. H. (2014). The phenomenological method in entrepreneurship. *International Journal of Entrepreneurship and Small Business*, 22(3), 276-285.**
36. [Matzler, K., Bailom, F., & Mooradian, T. A. \(2007\). Intuitive decision making. *MIT Sloan Management Review*, 49\(1\), 13.](#)

37. [Fleming, L. \(2012\). Breakthroughs and the “long tail” of innovation. MIT Sloan Management Review. v10.](#)
<http://sloanreview.mit.edu/article/breakthroughs-and-the-long-tail-of-innovation/>
38. [Yaniv, D. \(2011\). Revisiting Morenian psychodramatic encounter in light of contemporary neuroscience: Relationship between empathy and creativity. The Arts in Psychotherapy, 38\(1\), 52–58.](#)
<http://dx.doi.org/10.1016/j.aip.2010.12.001> [accessed on Dec 10, 2014]
39. [Ruebottom, T. \(2013\). The microstructures of rhetorical strategy in social entrepreneurship: Building legitimacy through heroes and villains. Journal of Business Venturing, 28\(1\), 98–116.](#)
<http://dx.doi.org/10.1016/j.jbusvent.2011.05.001>
40. [Chae, S., Seo, Y., & Lee, K. C. \(2013\). Effects of task complexity on individual creativity through knowledge interaction: A comparison of temporary and permanent teams. Computers in Human Behavior, 148](#)
<http://dx.doi.org/10.1016/j.chb.2013.10.015> [accessed on Dec 10, 2014]
41. [Global network of women inventors and innovators and 2013 awardees](#) at
<http://www.gwiin.com/page.php?pid=46&menu=sub>
42. [Datta, P. B., & Gailey, R. \(2012\). Empowering women through social entrepreneurship: Case study of a women's cooperative in India. Entrepreneurship Theory and Practice, 36\(3\), 569-587.](#)
43. [Della Peruta, M. R., Maggioni, M., & Schiavone, F. \(2014\). Exploring gender issues in entrepreneurship: what about students and recent graduates?. International Journal of Entrepreneurship and Innovation Management, 18\(1\), 59-74.](#)
44. [Lindberg, M., Lindgren, M., & Packendorff, J. \(2014\). Quadruple Helix as a way to bridge the gender gap in entrepreneurship: the case of an innovation system project in the Baltic Sea region. Journal of the Knowledge Economy, 5\(1\), 94-113.](#)
45. [Marlow, S., & McAdam, M. \(2013\). Gender and entrepreneurship: advancing debate and challenging myths; exploring the mystery of the under-performing female entrepreneur. International Journal of Entrepreneurial Behaviour & Research, 19\(1\), 114-124.](#)
46. **Thébaud, S. (2015). Status Beliefs and the Spirit of Capitalism: Accounting for Gender Biases in Entrepreneurship and Innovation. Social Forces, sov042.**

47. [Maden, C. \(2015\). A gendered lens on entrepreneurship: women entrepreneurship in Turkey. *Gender in Management: An International Journal*, 30\(4\).](#)
48. **Coleman, S. (2016). Gender, Entrepreneurship, and Firm Performance: Recent Research and Considerations of Context. In Handbook on Well-Being of Working Women (pp. 375-391). Springer Netherlands.**
49. [Simon Collinson and Geoff Gregson, 2003, Knowledge networks for new technology-based firms: an international comparison of local entrepreneurship promotion, *R&D Management* 33, 2, 2003](#)
<http://onlinelibrary.wiley.com/store/10.1111/1467-9310.00292/asset/1467-9310.00292.pdf;jsessionid=E279008C6D23D984B18A86D04F45D4D3.f04t03?v=1&t=hpk3dmbi&s=32a14c66845ab4146779e38df45177a1f6bdd265>
50. [Aard J. Groen, 2005, Knowledge Intensive Entrepreneurship In Networks: Towards A Multi-Level/Multi-Dimensional Approach, *Journal of Enterprising Culture*, Vol. 13, No. 1 \(March 2005\) 69-88](#) <http://www.insme.org/files/1810>
51. [Williams, C., & Lee, S. H. \(2009\). Resource allocations, knowledge network characteristics and entrepreneurial orientation of multinational corporations. *Research Policy*, 38\(8\), 1376-1387.](#)
<http://dx.doi.org/10.1016/j.respol.2009.05.007>
52. [Malecki, E. J. \(2011\). Connecting local entrepreneurial ecosystems to global innovation networks: open innovation, double networks and knowledge integration. *International Journal of Entrepreneurship and Innovation Management*, 14\(1\), 36-59.](#)
53. [Välíkangas, L., Hoegl, M., & Gibbert, M. \(2009\). Why learning from failure isn't easy \(and what to do about it\): Innovation trauma at Sun Microsystems. *European Management Journal*, 27\(4\), 225-233.](#)
<http://www.sciencedirect.com/science/article/pii/S0263237308001345>
54. [Chari, V. V., Golosov, M., & Tsyvinski, A. \(2012\). Prizes and patents: Using market signals to provide incentives for innovations. *Journal of Economic Theory*, 147\(2\), 781-801.](#)
55. [Dutta, S., & Fan, Q. \(2012\). Incentives for innovation and centralized versus delegated capital budgeting. *Journal of Accounting and Economics*, 53\(3\), 592-611. Retrieved 3, 53, from](#)
<http://www.sciencedirect.com/science/article/pii/S0165410112000213>

56. [De Blasio, G., Fantino, D., & Pellegrini, G. \(2014\). Evaluating the impact of innovation incentives: evidence from an unexpected shortage of funds. *Industrial and Corporate Change*, dtu027.](#)
57. [Baumann, O., & Stieglitz, N. \(2014\). Rewarding value-creating ideas in organizations: The power of low-powered incentives. *Strategic Management Journal*, 35\(3\), 358-375.](#)
58. [Boudreau, K. J., & Lakhani, K. R. \(2015\). "Open" disclosure of innovations, incentives and follow-on reuse: Theory on processes of cumulative innovation and a field experiment in computational biology. *Research Policy*, 44\(1\), 4-19.](#)
59. [Davidson, L. \(2015\). Do Frugal Innovations Lead to Frugal Outcomes? A Case Study of Healthcare in India.](#)
60. [Anil K Gupta, 2003, Innovations, institutions and involvement: Socio ecological crisis and insurgency in marginal environments, IIMAW.P. No.2006-04-03](#)
61. [Anil K Gupta, 2009, Grassroots Green Innovations for Inclusive Sustainable Development in The Innovation for Development Report 2009-2010, Strengthening Innovation for the Prosperity of Nations; ed. Augusto Lopez-Claros, New York:](#)
62. [Anil K Gupta, 2010, Dr C V Seshadri Memorial Lecture on Innovation, Investment, Enterprise: Generating Sustainable Livelihood at Grassroots at Shri AMM MurugappaChettiar Research Centre, Chennai on 4th Dec 2010](#)
63. [Anil K Gupta, Empathetic Innovations: Connections across boundaries, in Timeless Inspirator, Reliving Gandhi, \(Ed\) R A Mashelkar, Pune: Sakal Publications, 2010, 42-57](#)
64. [Anil K Gupta, From Sink to Source: The Honey Bee Network Documents Indigenous Knowledge and Innovations in India, Innovations, Summer 2006, MIT Press, p.49-66.](#)
65. [Anna Ståhlbröst and Birgitta Bergvall-Kåreborn, 2011, Exploring users motivation in innovation communities, *International Journal of Entrepreneurship and Innovation Management*, 14 \(4\), 298-314](#)

66. **Business unorthodox: creativity and the bottom line, by Play,**
<http://www.stada.org.sg/Generic/GetImage.ashx?id=615&a=92&r=634680295693330000> (accessed on May 15, 2012)
67. [Eric von Hippel, Democratising Innovations, Full Book available at his home page under creative common license,](http://web.mit.edu/evhippel/www/democ.htm)
<http://web.mit.edu/evhippel/www/democ.htm>;
68. [Von Hippel, E. \(2007\). Horizontal innovation networks—by and for users. Industrial and corporate change, 16\(2\), 293-315.](#)
69. [Frank Piller&ChristophIhl, 2008, Open Innovation with Customers: Foundations, Competences and International Trends, Technology and Innovation Management Group, RWTH Aachen University, Germany](#)
70. [Füller et al. \(2006\) Innovation creation by online basketball communities. Journal of Business Research, Vol. 60, 60-71](#)
71. [Galbraith, Jay R. 1982. Designing the innovating organization. Organizational Dynamics 11, no. 1 \(Winter\): 5-25.](#)
72. Global Knowledge Primer: <http://www.entovation.com/gkp/gkpindex.htm>
downloaded on Dec 9, 2009
73. [Preston, J. T. \(2003\). Building success into a high-tech start-up. Industrial Physicist, 9\(3\), 16-19.](#)
74. [Amadi-Echendu, J. E. \(2007\). Thinking styles of technical knowledge workers in the systems of innovation paradigm. Technological Forecasting and Social Change, 74\(8\), 1204-1214.](#)
75. **Tan, J., Fischer, E., Mitchell, R., &Phan, P. (2009). At the center of the action: Innovation and technology strategy research in the small business setting. Journal of Small Business Management, 47(3), 233-262.**
76. [L. Mortara and Tim Minshall, \(2011\), How do large multinational companies implement open innovation?, Technovation 31 \[2011\], 586-597.](#)
77. [Malin Lindberg, 2011, Bottom-up development of innovation theory and policy, Triple Helix IX International Conference, Stanford University, 11-14 July 2011](#)
78. [Papers 2015- 2016\103. Between Invention and Innovation- An Analysis of Funding for Early-Stage Technology](#)

[Development.pdf](http://knowledge.wharton.upenn.edu/article.cfm?articleid=1540)http://knowledge.wharton.upenn.edu/article.cfm?articleid=1540 (accessed on Dec 25, 2013)

79. [Narula, R., & Jormanainen, I. \(2008\). When a Good Science Base is not enough to Create Competitive Industries: Lock-in and Inertia in Russian Systems of Innovation. United Nations University, WP 2008:059, Maastricht, Netherlands](#)
80. [Scott A. Shane and Karl T. Ulrich, 2004, Technological Innovation, Product Development, Entrepreneurship in Management Science, Management Science, 50 \[2\], 133-144](#)
81. [CINE FINAL Papers 2014- 2015\101. THE 10 FACES OF INNOVATION.docx](#)