

Topics:

Session 1: Introduction and Perspectives on Development

Faculty: Prof. Shishir K. Jha [SOM]

Required Readings:

1. "A day in life of India's poorest," A Special Report, India Today, August 12, 2013.
2. "Tracking the growth of India's middle class," The McKinsey Quarterly, November 3, 2007.
3. "For richer, for poorer," A Special Report, The Economist, October 13, 2012.

Key Questions:

- 1) What is the course about?
- 2) Responsibilities as a Tata Fellow, and the resources available?
- 3) Designing for the *underserved*?

Session 2: Perspectives on Development: State, Market and Commons

Faculty: Prof. Shishir K. Jha & D Parthasarathy [HSS]

Required readings:

1. C. K. Prahalad, "Fortune at the Bottom of the Pyramid," Wharton School Publishing, 2009. Read pp. 1-22, Ch. 1.
2. Jean Drèze and Amartya Sen, "An Uncertain Glory: India and its Contradictions," pp. 1-9, Ch. 1 (A New India?), pp. 37-41, Read Ch. 2 (Integrating Growth and Development)

Key Questions:

- 1) How are 'they' underserved? *Unequal by technology, market, policy, culture.*
- 2) What are Philosophies of Development: Centralized Planning vs. Decentralized Development
- 3) Experience with Globalization

Session 3: Conducting Qualitative Research and Case Studies in Product Development

Faculty: Prof. A Kalro [SOM] & Prof. B K Chakravarthy [IDC]

Required Readings:

1. Stephen Wilcox, "Ethnographic methods for new product development"
2. "Guidelines for conducting a focus group"
3. Kirsti Malterud, "Qualitative research: standards, challenges and guidelines"
4. Case Study - "Fisher Miller Skeleton, Design and Business Synergy"
5. Case Study - "MP Video - Strategic use of design in endoscopic video"

August 15, 2014: No Class

Session 4: Conducting Quantitative Research and Product Development

Faculty: Prof. S Noronha [Chemical]& Prof. S Mahajani [Chemical]

Required Readings:

1. Inclusive Indian Innovations: Perspectives and Case Studies – Sakal Media
2. VIJAY GOVINDARAJAN and RAVI RAMAMURTI, "REVERSE INNOVATION, EMERGING MARKETS, AND GLOBAL STRATEGY", Global Strategy Journal, 1: 191-205 (2011)
3. C.K. Prahalad and R.A. Mashelkar, "Innovation's Holy Grail", Harvard Business Review, July–August 2010

Key Questions:

- 1) What are the 'key' differences between qualitative and quantitative approaches?

Session5: Conducting Research: Need Assessment & Synthesis and Examining Agro Sector

Faculty: Prof. A.Hingorani [IDC]&Prof. Narendra Shah [CTARA]

Required Readings:

- 1.R.W. Hamming, "You and your research: a stroke of genius: striving for greatness in all you do"
- 2.Martin A. Schwartz, "The importance of stupidity in scientific research", Journal Of Cell Science, 121, 2008

Session 6: Examining Energy and Housing Sectors

Faculty: Prof. N C (Energy) & Prof. Athavankar (Housing)

Readings from Kaushik Basu and Annamie Maertens, "The New Oxford Companion to Economics in India," OUP, 2012 [i) Energy, pp. 173-177; ii) Power Industry, pp. 551-558; iii) Power Sector & Regulation, pp. 558-559, iv) Housing Finance, pp. 345-348; v) Infrastructure, pp. 391-399]

September 12, 2014: No Class [Mid Term Week]

Session 7: Examining Health and Education

Faculty: Prof. Santosh (Health) & Prof. Alka (Education)

Required Readings:

- 1) Readings from Kaushik Basu and Annamie Maertens, "The New Oxford Companion to Economics in India," OUP, 2012 [i) Health Indicators, pp. 325-331; ii) Quality of Medical Care, pp. 466-469]
- 2) Cancer burden and health systems in India, Issues 1 to 3.

Session 8: Research and Case Study in Energy Sector

Faculty: Prof. Upendra Bhandarkar

October 03, 2014: No Class [Dussehra]

Session 9: Designing Products For The Bottom Of The Pyramid

Key Questions:

- 1) What is an effective method for designing products for the underserved?
- 2) How is this method different from classical product design and manufacturing?

Required Readings:

- 1) HBS Case: How GE is Disrupting Itself(<http://hbr.org/2009/10/how-ge-is-disrupting-itself/>)
- 2) Walter Vincenti, "What Engineers Know and How They Know It," Johns Hopkins Univ. Press (February 1, 1993). Read pp. 3-15, Ch. 1 (Introduction: Engineering as Knowledge)

Session 10: Operations for Indian Entrepreneurs

Invited Speakers

October 24, 2014: No Class [Diwali]

Session 11: Interconnected Nature Of Systems and Conclusion

Key Questions:

- 1) How does my solution affect the system of interest?
- 2) What are the components of the system of interest and how are they interconnected?
- 3) What methods are available for studying systems?

Required Readings:

- 1) Olivier L. de Weck, Daniel Roos, and Christopher L. Magee, "Engineering systems: meeting human needs in a complex technological world," Cambridge, Mass.: MIT Press, c2011. Read pp. 23-69, Ch. 2, 3, and section of Ch. 4.

Session 12: Project Presentations