

BADM 532 - Sustainable Product and Market Development for Subsistence Marketplaces

**Fall 2011
Mondays 5:00-8:00 pm**

Instructor
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<http://www.business.illinois.edu/subsistence/teaching/spmdsm.html>



Overview - <http://www.business.illinois.edu/subsistence/docs/SPMDSM.pdf>

BADM 532 and 533 is a two-course sequence including an international immersion experience, however, each course may be taken separately as well, subject to space availability. This course is targeted at MBAs, Graduate Students in Engineering and Industrial Design, graduate students in other areas (including but not restricted to Psychology, Sociology, and Anthropology), and outstanding senior undergraduates in Business, Industrial Design, and other areas.

An application available should be completed ideally before April 15 and decisions to admit to the program will be made on a continuous basis, and on a first-come first-served basis after April 15 and until the beginning of the Fall semester.

The field trip is optional and involves the student bearing a sizable percentage of the expenses. Orientation sessions in Spring of the preceding year will be held to explain procedures.

Course Description

Sustainable Product and Market Development for Subsistence Marketplaces - Students in business, engineering, industrial design and other areas will spend five weeks of virtual immersion in subsistence contexts, including analysis of life circumstances in subsistence through interviews, simulation, and videos, and development of conceptual models of poverty, needs, products, and market interactions. Next, the course will focus on emersion of principles for business and engineering using a rich set of cases and a wide range of guest speakers. Student groups will formed to balance technical and business skills and match interests with our company sponsors. Groups will generate

and evaluate a long list of possible ideas, and design market research to be conducted during an optional international field trip over part of the winter break. Students have the option to enroll in a spring course which will focus on taking the product idea to a prototype and a business plan.

This course is differentiated from other courses offered at the university in the extent of experiential learning and in its highly cross-functional nature. It is differentiated from cross-functional experiential new product development courses offered elsewhere in the nation by focusing on products for low-literate, low income individuals in subsistence marketplaces, such as in transitional economies, like India and China.

Background

Recent work has begun to provide broad insight into the role and nature of innovation targeted at the 4 billion living in poverty in the global marketplace, also referred to as the bottom of the pyramid. These subsistence marketplaces have been described in terms of their size and accessibility, with brand conscious, connected customers willing to accept new technology. The literature has emphasized the market development imperative in terms of creation of the capacity to consume, the need for new goods and services, dignity and choice for the poor, and the importance of developing trust between buyer and seller. Several principles of innovation have been discussed including finding sustainable solutions, understanding functionality, innovating with process and deskilling work, educating low-literate consumers, designing for hostile infrastructure, and designing innovative distribution chains. Issues of importance to business research and education about the nature of product and market development for these distinctly different marketplaces will be addressed through our Laboratory Course on Sustainable Product and Market Development for Subsistence Marketplaces.

New product development lab courses are not new; however, what is new here is a course that focuses on developing products and services to serve the needs of those living in subsistence marketplaces. Overlaying the content in a typical new product develop lab course will be a separate module that develops contextual understanding of subsistence marketplaces. This type of immersion in the unique context will set the stage for new product development.

The course spans issues from business to engineering. It covers, at one end, the bottom-up understanding of buyers, sellers, and marketplaces beyond literacy and resource barriers. At the other end, it covers the technologies that could be used to develop innovative products. In between, the course includes issues in product and market development as well as the nature of research methods to employ.

The course will address a number of issues, a few of which are listed as exemplars.

- What are the characteristics of successful and unsuccessful products for subsistence marketplaces?
- How should products be designed for such marketplaces?
- What is the nature of distribution channels for successful versus unsuccessful products?
- How should market research be conducted throughout the new product development process? How should research be designed to obtain feedback about concepts, prototypes, and distribution channels from low-literate, low-income consumers and distribution channel members?

- How do buyers and sellers make decisions and participate in subsistence marketplaces?

Unique Learning Opportunities

The unique and pioneering nature of this course lends itself to some learning opportunities for students over and above the content described above.

- ❖ An opportunity to compare, contrast, and, therefore, sharpen Marketing skill sets for traditional marketplaces. To enroll in this course, it is not at all necessary that students have clear plans to work in subsistence marketplaces. On the contrary, experience in a radically different context, as different as can be, and comparison and contrast, can serve to sharpen existing knowledge. Lessons learnt for subsistence marketplaces can in turn be applied in other marketplaces.
- ❖ An opportunity to contribute to knowledge creation in this area. This is the first course of its kind we know of and there is no book out there. We expect project reports from students to form the basis for future learning material to be disseminated widely through publications.
- ❖ An opportunity to broaden one's perspective across, cultural as well as literacy and resource barriers.

Place in the Curriculum

The target students are Master's students in engineering, marketing and other areas of business (MBA's) and a few select areas in the college of liberal arts such as cross-cultural psychology, sociology and anthropology. In the MBA program, the courses will count toward concentrations in marketing, and in some other areas.

Important Administrative Issues

A number of issues including intellectual property and to internal immersion costs and participation will be discussed in class and will require signed agreements. The actual cost of the field trip to be borne by students is also contingent on the number of participants. In providing financial support for the field trip, priority is given to graduate students. However, every effort is made to extend support to all students enrolled in the course. In the event of lack of resources or of sufficient demand, the field trip may be cancelled.

Readings

Cases from the book, Fortune at the Bottom of the Pyramid, by C. K. Prahalad will be used.

Recommended books

- Fortune at the Bottom of the Pyramid - by C. K. Prahalad
- Enabling Consumer and Entrepreneurial Literacy in Subsistence Marketplaces – Madhu Viswanathan, S. Gajendiran, and R. Venkatesan
- Capitalism at the Crossroads – Stuart Hart

Articles on online reserve will be used

Detailed article reading list provided as appendix

Grading

| | |
|--|-----|
| Group Project..... | 50% |
| Class Participation & Assignments..... | 50% |

Attendance & Participation

50% of the grade for this class is for participation in in-class assignments and discussions, and tutorials. Therefore, attendance is very important and a necessary condition for participation. Students who do not attend class regularly cannot participate effectively and can easily lose one or more letter grades. In-class work will involve presentations and write-ups of cases and other assignments throughout the semester.

Project

The course emphasizes hands-on experience and applications. Therefore, a sizable portion of the grade is for a project where you will design a new product and develop a sustainable marketing plan. You will work in a group which will serve as a resource for completing several assignments and a final presentation and written report. Each individual's contribution to his/her group will be assessed by peer evaluation. The peer evaluation form is attached to the end of this handout. A deduction in the points earned for group assignments will be made in proportion to the group peer evaluations. This often leads to reduction of an individual's overall grade by one or more letter grades. Free riding will be identified & penalized in this course.

Grading

The two most important aspects for grading are in-class work and participation in the group project. Therefore, lower performance in class work (i.e., missing class-work for more than 1 class) or in participation in group work (as indicated by peer evaluation below 100%) can lead to reduction in overall grade by one or more letter grades.

Fall Course Schedule
Monday – 5:00 - 8:00 pm

Part 1 – Immersion

The aim of this part of the course will be to provide an opportunity for students to immerse themselves in the context of subsistence marketplaces through cases and findings from research. Whereas the field trip will provide an opportunity for actual immersion, the first 5 weeks of the course will attempt to create a learning environment to simulate such immersion.

- | | |
|-----------------|---|
| Week 1 (Aug 22) | Orientation/Introduction to the Course Group Formation Exercises Poverty Simulation |
| Week 2 (Aug 29) | Understanding the Subsistence Context – Individuals, Groups, and Society Analysis and Profile of Interviews and Videos Developing Conceptual Models of Poverty Speaker - Organizational sponsor |
| Week 3 (Sep 12) | Understanding the Subsistence Context – Local environments Analysis and Profile of Interviews and Videos Developing Conceptual Models of Ecology and Poverty Speaker - Organizational sponsor |
| Week 4 (Sep 19) | Understanding the Subsistence Context – Products and Markets Analysis of Interviews and Videos Developing Models of Needs, Products, and Markets Speaker - Organizational sponsor |
| Week 5 (Sep 26) | Understanding the Subsistence Context - Summary Comparison and Contrast of Literacy and Poverty in the US versus India Analysis of Readings ¹ Final Group Assignments |

Part 2 – Emersion

The aim of this part of the course is to extract general principles on buyer and seller behavior, market research, and the marketing mix elements for subsistence marketplaces while contrasting them with traditional marketplaces.

- | | |
|----------------|----------------------------------|
| Week 6 (Oct 3) | Product Design Primer Reading |
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¹ Reading list attached.

Group Projects – Idea Generation

- Week 7 (Oct 10) Technology
Assignment - Case – ITC e-Choupal
Group Projects – Idea Generation
Reading
Group Projects – Idea Screening and Evaluation
- Week 8 (Oct 17) Products and Distribution
Assignment - Case – Annapurna Salt
Understanding the Subsistence Context - Implications for Market Research
Group Projects – Idea Screening and Evaluation
- Week 9 (Oct 24) Promotion and Pricing
Assignment - Case – Jaipur Foot
Group Presentation of Idea Screening and Evaluation
Group Projects – Concept Generation
- Week 10 (Oct 31) Marketing and Market Research
Readings
Group Projects – Concept Generation
- Week 11 (Nov 7) Marketing and Market Research
Group Projects – Concept Generation and Evaluation
Group Projects - Development of Market Research Instruments
Reading
- Week 12 (Nov 14) Marketing and Market Research
Group Presentation of Market Research Plans
- Week 13 (Nov 28) Field Trip Planning and Orientation
- Week 14 (Dec 5) Field Trip Planning and Orientation

Parts 1 and 2, immersion and emersion, will lay the foundation for students to embark on specific product and market development research projects.

Optional Field Trip – 2-week trip (including travel) between December 27 – January 10 (approximately)

Trip Objectives and Plans

Immersion in subsistence marketplaces through first hand observation of the influences of poverty, literacy, and culture

- Individual and group interactions in urban and rural settings
- Observations in urban and rural settings

Learning about a diverse set of organizations and their initiatives in subsistence marketplaces

- Field trips to observe profit and non-profit organizations

Market research for projects

- Individual and group interviews in rural and urban settings
Discussions with company sponsors regarding projects

Option of registering for Spring Course described subsequently

Assignments

Immersion

In this part of the course, there will be a number of individual assignments. Using materials such as poverty simulations and interviews, students will write first-person profiles of individuals in poverty, draw broader impressions about living in subsistence, and build conceptual models of poverty and related factors and behaviors. A broader appreciation of lives and living in subsistence will then be followed by a focus on the economic realm. Students will use interviews to derive the set of needs, products, and markets for individuals living in subsistence.

Emersion

In this part of the course, each group will be assigned to lead the discussion on two cases. Their responsibility will be to distribute broad discussion questions and lead the discussion. The other groups will submit write-ups. These write-ups will be due before class on the day of the case and with a maximum limit of 2 single spaced pages. The write-ups as well as the class discussion will assume thorough knowledge of the case and focus on analyzing the material and not on describing the facts available in the case. As is clear from the nature of the assignments, everyone is expected to have carefully read each case and analyzed and discussed it with their group members. Each group will appoint a leader for each write-up whose name will be listed in the assignment. Everyone in the group will have a turn at being the leader, who will be responsible for consolidating the discussion.

The analysis of each case will focus on the following issues:

- Needs and Consumer Behavior
 - o Specific need being served
 - o Relevant consumer behaviors
 - o Product and market context
 - o Larger context of life circumstances
- Market Research
 - o Examples of methods used
 - o Suggestions for methodological improvements
- Management and Engineering Issues
 - o Technology
 - o Products
 - o Distribution
 - o Promotion
 - o Pricing
- Recommendations for Product and Market Development for Subsistence Marketplaces
 - o Specific lessons learnt for group project

Group project

Group Formation

The aim of this stage is to enable interactions between students and allow for the formation of a group with balanced functional skills and interest in the project topic.

Week 1 - Group Formation Exercises

Week 4 - Group Formation

Idea Generation

The aim of this stage is to generate a wide range of ideas, essentially erring on the side of inclusion. Brainstorming sessions and focused meetings to which students bring a set of ideas are suggested approaches. This stage can be facilitated by reviewing video and interview based material to consider needs and ways to address them, a market based approach. Alternatively, technologies can be considered that could lead to innovative product ideas. Groups will be asked to summarize their discussions to the rest of the class.

Week 7 - Group Projects –Idea Generation

Week 8 - Group Projects – Idea Generation

Idea Screening and Evaluation

In this stage, the list of ideas are narrowed carefully to a smaller list. Each idea is carefully considered and the group decides on one at the end of this process. Groups will be asked to summarize their discussions to the rest of the class.

Week 8 - Group Projects – Idea Generation, Screening and Evaluation

Week 9 - Group Projects – Idea Screening and Evaluation

Week 10 - Group Projects – Idea Screening and Evaluation

Development of Market Research Instruments

The aim of this stage is to develop qualitative and quantitative market research instruments that are ready for use during the field trip.

Week 11 - Group Projects – Idea Screening and Evaluation and Development of Market Research Instruments

Week 12 - Group Projects – Idea Screening and Evaluation and Development of Market Research Instruments

Week 13 - Group Projects - Development of Market Research Instruments

Assignment 1 – Due Week 2

Please write down your thoughts on the simulations while they are fresh in your memory. Please consider three levels. What happened at the simulation; your psychological reactions in terms of feelings, decision-making and perceptions of others to name a few things, your overall understanding of poverty from the simulation as well as the assigned book, Nickel and Dimed. It would be useful if you can write down your thoughts while they are fresh in your memory.

– 2 pages (single spaced) as hard copy before class.

Assignment 2 – Due Week 2

Take the interview assigned to you and write out a profile of the individual **in first person**. The idea is to cover all four interviewees across assignments. Please note that you are now part of the research team which comes with some responsibilities; these interviews should not be distributed to anyone by you and should be considered completely confidential. **THIS IS VERY IMPORTANT**. The password for opening the file is **subsistence**.

DIARY ENTRY - Your first person profile and your broader impression of living in subsistence. Please note that we are not focusing on the economic realm as in product and market interactions just yet. It is more on lives and living in subsistence.

- Please focus not just on the economic realm as in product and market interactions but more on life circumstances in subsistence where the marketplace is one part.
- Identify key life-changing circumstances
- Reflect on what you learned about living in poverty – i.e., the types and nature of challenges that individuals have to face in different areas such as food, etc.

– 2 pages (single spaced) to be submitted as hard copy before class Monday and as email before class (part of it is the first person account and part of it is your broader impression of subsistence).

Our discussion will start out with striking impression that each of you had about the person you profiled (about 5 minutes each), which we will organize into topics for in-depth subsequent discussion.

Velamma - Students with last names from A to F

Sumitra - Students with last names from G to K

Janaki - Students with last names from L to P

Mythili – Students last names from R to Z

Assignment 3 – Due Week 3

Read two more interviews covering buyers and sellers

- A comparison of people in the total of three interviews
- A synopsis based on your inferences and interpretations of all three interviews
- A broader discussion of poverty based on three interviews
- Take the assignment any direction you wish, highlight turning points in lives, etc.

2 pages single spaced hard copy before 5 pm Monday.
Your choice as to which two interviews you add on.

Assignment 4 – Due Week 4

Begin to abstract across interviews to build conceptual maps or big pictures
Any form is fine.

- Causal diagram with boxes (with large category titles and a list of factors) and arrows supported by text
- A collage
- A more organic model
- Conceptual maps should be about people's lives rather than purely economic.
- Model of individual, family, social, economic, other factors and how they affect daily behaviors for example
- Some antecedents and some outcomes
- Could be a model of how skills develop

Take an angle and build a broader understanding beyond the individual interviews

Form a group of 4 with people in class you don't know

Work on this during Week 4

1 ppt slide presentation (2-3 slides fine) per group – 5 minutes per group – to be emailed before class and presented the following week

1 single-spaced page *per student* summarizing the model, how it was developed, and the rationale – emailed before class

Assignment 5 – Due Week 5

As newly formed group, examine the intersection of subsistence and ecology

- What are the unique ecological issues that subsistence marketplaces face?
- How does this affect their daily lives?
- What are some directions to take to find solutions?
- Please be as creative as you wish to be, bringing in images and providing insights

- The questions above are merely examples – please take the assignment in any direction you wish
- 1 ppt slide presentation (2-3 slides fine) per group – 5 minutes per group – to be emailed before class and presented during class

Assignment 6 – Due Week 6

Focus on buyers, sellers, needs, products, and markets Read remaining if any of all five interviews

As a newly formed group, develop model that captures categories of needs, categories of products that satisfy these needs, and market interactions

If you wish to display additional elements beyond these three circles that help express yourself, please feel free to do so

Feel free to categorize needs as you see fit, ranging from the physiological to the spiritual 1 ppt slide presentation (2-3 slides fine) per group – 5 minutes per group – to be emailed before class and presented during class

Assignment 7 – Due Week 7

We begin some analysis of readings. Through the course, the readings will supplement things and are very important to read in a timely way. We will briefly discuss the papers in class next week. Please read the two papers, one on the US and one on India, both for substantive content and for the method used. You will see how qualitative research (which you will be doing) is presented and you will see that your interpretation of the first few weeks has been very much in the mode of qualitative analysis. I am going to ask you to provide bullet point responses and send before classtime. Each bullet point can be 2-3 sentences.

- a. One paper provides the product portfolio for the typical low income household. The updated table shows a more recent estimate from 2009 and then from 2011.

1 bullet point - How this reading would modify the poverty model you developed?

1 bullet point - How this reading would modify the ecological model you developed?

1 bullet point - How this reading would modify the needs/products/markets model you developed?

- b. The second paper is on thinking, feeling, and coping. Although set in a US context, it is a very useful paper.

- 1 bullet point on aspects of thinking you read about that you may have engaged in during the poverty simulation - provide an example of what you did and why it fits that type of thinking described in the paper
 - 1 bullet point on aspects of feeling you read about that you may have engaged in during the poverty simulation - provide an example of what you did and why it fits that type of feeling described in the paper
 - 1 bullet point on aspects of coping you read about that you may have engaged in during the poverty simulation - - provide an example of what you did and why it fits that type of coping described in the paper
- c. Finally, in comparing the two papers:
- 1 bullet point on similarities between low-literate, low-income US consumers and Indian subsistence consumers
 - 1 bullet point on differences between low-literate, low-income US consumers and Indian subsistence consumers

Papers

Viswanathan, Madhubalan, Jose Antonio Rosa, and James Harris (2005), "Decision-Making and Coping by Functionally Illiterate Consumers and Some Implications for Marketing Management," *Journal of Marketing*, 69(1), 15-31.

Viswanathan, Madhubalan (2007), "Understanding Product and Market Interactions in Subsistence Marketplaces: A Study in South India," in *Product and Market Development for Subsistence Marketplaces: Consumption and Entrepreneurship Beyond Literacy and Resource Barriers*, Editors, Jose Rosa and Madhu Viswanathan, Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, 21-57, Elsevier.

Group Project – Week 7

Tease out the needs, drivers, and larger context for your project topic b. Plan out idea generation for the core design area c. Talk through some dos and don'ts for group functioning - eventually moving to a code of conduct in a couple of weeks. Each group has a slightly different task. My advice at this point is to not be limited by previous offerings but think completely out of the box.

Assignment 8 – Due Week 8

For the assigned paper, please submit the following bullet points .

- 1 bullet point on an example from an interview you read that illustrates an element of transactions or exchanges
- 1 bullet point on a unique element of transactions or exchanges you noticed from interviews in addition to those in the paper
- 1 bullet point on an example from an interview you read that illustrates an element of the interactional environment
- 1 bullet point on a unique element of the interactional environment you noticed from interviews in addition to those in the paper
- 1 bullet point on an example from an interview you read that illustrates an element of the larger context
- 1 bullet point on a unique element of the larger context you noticed from interviews in addition to those in the paper

Paper

“Marketing Interactions in Subsistence Marketplaces: A Bottom-Up Approach to Designing Public Policy,” with Srinivas Sridharan, Robin Ritchie, Srinivas Venugopal, and Kiju Jung.

Group Project – Week 8

Groups will present a summary of their progress on needs/drivers/context and idea generation.

Please meet with your group and generate ideas. I will ask each group to very briefly discuss needs/drivers/context relevant to the project the ideas you came up with. Please use a few slides do this. You can convey the ideas any way you want along with the methods you used to generate them.

The game plan is idea generation, idea generation, idea generation. Please don't be constrained at this stage for any reason beyond the rough product category guidelines.

Don't rule out any idea, however absurd you may think others may think it is. We will then continue with idea generation for another week at least without evaluation.

Group Case Analysis – Week 8

Case - ITC e-Choupal

Group 1 will take the perspective of a consultant hired by ITC's competitor.

Group 2 will take the perspective of ITC.

Group 3 will take the perspective of an NGO that is critically evaluating the actual impact of ITC from the farmers' and community's perspective.

Group 4 will take the perspective of a government agency overseeing agriculture

Group 5 will lead the discussion with overview of issues to start out, asking each group to present, presenting questions for groups to debate, and providing some concluding comments

Each group will prepare slides. No write-ups are needed. Each group will be asked to make a 5 minute presentation (maximum) of their key insights and recommendations. After this, the discussion-leading group will lead a free flowing discussion using slides with questions where groups maintain their original positions and challenge other groups whom they disagree with.

The analysis of each case can focus on the following issues. However, each group is free to choose any specific direction or emphasis.

- . Needs and Consumer Behavior
 - o Specific need being served
 - o Relevant consumer behaviors
 - o Product and market context
 - o Larger context of life circumstances
- . Market Research
 - o Examples of methods used
 - o Suggestions for methodological improvements
- . Management and Engineering Issues
 - o Technology
 - o Products
 - o Distribution
 - o Promotion
 - o Pricing
- . Improvements

Recommendations for Product and Market Development for Subsistence Marketplaces

Group Project – Week 9

Please continue idea generation. Sort out ideas into categories if that helps and separate focal design ideas from other ideas. I suggest developing criteria but continuing to emphasize idea generation. In class, you will be presenting your ideas using ppt slides.

Dos and don'ts of group interactions if you have not done so. Please email slides before class.

Assignment 9 – Due Week 9

Reading – analysis of the assigned paper

1 bullet point on something new you learned about the subsistence entrepreneur from the reading that you did not know before.

1 bullet point on something new you learned about the subsistence consumer from the reading that you did not know before.

1 bullet point on something new you learned about the subsistence entrepreneur ecosystem from the reading that you did not know before.

Paper

Viswanathan, Madhubalan, Jose Antonio Rosa, and Julie Ruth, "Exchanges in Marketing Systems: The Case of Subsistence Consumer Merchants in Chennai, India," *Journal of Marketing*, 74 (May), 1-18.

Group Case Analysis – Due Week 9

Discuss the Unilever case.

Group 1 will lead the discussion and provide an overview as well as questions to other groups

Group 2 will take the role of an NGO that evaluates Unilever's efforts to consider a possible partnership

Group 3 will take the role of an NGO that is critical of Unilever's efforts

Group 4 will take the role of a company that is producing some other products considering developing a distribution network

Group 5 will take the perspective of a local village authority (like a "Panchayat") looking at Unilever's impact on the village

Please email before class.

Please focus on:

- Needs and Consumer Behavior
 - o Specific need being served
 - o Relevant consumer behaviors
 - o Product and market context
 - o Larger context of life circumstances
- Market Research
 - o Examples of methods used
 - o Suggestions for methodological improvements
- Management and Engineering Issues
 - o Technology

- o Products
- o Distribution
- o Promotion
- o Pricing
- Recommendations for Product and Market Development for Subsistence Marketplaces
- o Specific lessons learnt for group project

Group Project – Due Week 10

Please consolidate your schedules and send out an email to sponsors and cc me for:

- a. 1 meeting in the first 10 days of November.
- b. 1 meeting between November end and December 8.

Please complete this task no later than this Thursday.

Mid-Semester presentations on project

- Needs/Drivers/Context
- Idea generation
- Ideas
- Categorized within clusters – if you have different aspects to the focal design or different categories of design
- Criteria for evaluation and relative importance of criteria
- Ranking of ideas on criteria

Field trip

- Whom you want to speak to – housewives, etc.
- What you want to observe
- What products/items from India do you want purchased in advance for your trip

Assignment 10 – Due Week 10

Please read one half of each of the two papers as follows.

Viswanathan, Madhu (2011), “Consumer Behavior Across Literacy and Resource Barriers,” in *Wiley International Encyclopedia of Marketing, Volume 3 – Consumer Behavior*, Richard Bagozzi and Ayalla A. Ruvio, Volume Editors, Jagdish N. Sheth and Naresh K. Malhotra, Editors in Chief, 44-54. – Upto Page 15 where a section ends

Viswanathan, Madhubalan (2010), “A Micro-Level Approach to Understanding BoP Markets,” *Next Generation Business Strategies for the Base of the Pyramid: New Approaches for Building Mutual Value*, Editors, Ted London and Stuart Hart, FT Press. – Upto Page 25 where a section ends.

Bulletpoints needed:

Viswanathan, Madhu (2011), "Consumer Behavior Across Literacy and Resource Barriers," in *Wiley International Encyclopedia of Marketing, Volume 3 – Consumer Behavior*, Richard Bagozzi and Ayalla A. Ruvio, Volume Editors, Jagdish N. Sheth and Naresh K. Malhotra, Editors in Chief, 44-54.

1 bullet point on a fundamental similarity between US low-literate, low-income consumers and Indian subsistence consumers Not covered in any of the papers to date

1 bullet point on a fundamental difference between US low-literate, low-income consumers and Indian subsistence consumers Not covered in any of the papers to date

Please abstract to an appropriate level rather than point to very concrete differences or similarities

Viswanathan, Madhubalan (2010), "A Micro-Level Approach to Understanding BoP Markets," *Next Generation Business Strategies for the Base of the Pyramid: New Approaches for Building Mutual Value*, Editors, Ted London and Stuart Hart, FT Press.

1 bullet point that summarizes the essence of what you have learned about subsistence consumers and their difference from **middle class** US consumers

1 bullet point that summarizes the essence of what you have learned about subsistence entrepreneurs and their difference from **middle class** US entrepreneurs

Group Project – Due Week 11

Incorporate more background research. Continue part and whole idea generation.

And set up the meeting with sponsors. Cc me on the final agreed time and place (which can be my office, 61 Wohlers – my graduate assistant will give you access).

I would like to be in the first meeting and will find a way. In the next class, I am going to have small group interactions with John Clarke in the last hour so we get another person providing feedback. No class presentation of project but small group interaction.

We have begun orientation for the field trip. Please collect your questions for November 12.

Please go through the itinerary in detail. Now is also the time for suggestions for the trip.

Videos are available at

<http://www.business.illinois.edu/subsistence/teaching/teachingmaterial>

[s.html](#) for your review and cover interviews with participants, cultural issues, and so forth.

Assignment 11 – Due Week 11

We should get the first push on the emersion diary. **Two bullet-points** of what emerged here in terms of new concepts, the customization of concepts you already knew in your core discipline and other disciplines? Put differently, how has your understanding of subsistence changed the way you think about your discipline and related disciplines (e.g., marketing and business in general)? Provide specific examples of concepts that need rethinking.

Read the assigned paper and prepare **two bullet points** of 2-3 sentences each on the insights from this for your own field research for your specific projects.

Submit **both in a single file** before class.

Paper

Viswanathan, Madhubalan, Roland Gau, and Avinish Chaturvedi (2008), "Research Methods for Subsistence Marketplaces," in *Sustainability Challenges and Solutions at the Base-of-the-Pyramid: Business, Technology and the Poor*, Editors Prabhu Khandachar and Minna Halme, Greenleaf Publishing, Sheffield, UK, 242-260.

Group Case Analysis – Due Week 11

Our case for next week is Jaipur Foot. Group 1 will be the discussion leaders.

Group 1 - leads the discussion and apply learning to their own project/conduct a challenge.

Group 2 is Jaipur Foot Company explaining key aspects of their model.

Group 3 will take the perspective of a design consultant advising an company contemplating entering this marketplace.

Groups 4 and 5 will take the perspective of a company comparing and contrasting costs and functionalities of the Jaipur Foot to expensive alternatives and trying to bring this model to advanced economies.

Assignment 12 – Due Week 12

A. Based on reading - **Two bullet-points** of how lessons from

marketplace literacy impact your thinking on your project.

- B. **One bullet point** to add to our discussion of group dynamics and emotional intelligence – they are your insights of what helps you the most in this realm
- C. Please see the movie and prepare **one bullet point** of what you learned that was new and **1 bullet point** on how it impacts your project.

Submit **all three in a single file** before class.

Paper

Viswanathan, Madhubalan, Srinivas Sridharan, Roland Gau, and Robin Ritchie (2009) "Designing Marketplace Literacy Education in Resource-Constrained Contexts: Implications for Public Policy and Marketing," *Journal of Public Policy and Marketing*, 28 (1), 85–94.

Group Project – Due Week 12

For your project, please address and send the most recent ppt file to the group folder before class.

Continue work on the Excel File organized by

- a. Ideas
- b. Hybrid versions of ideas
- c. Categorized within clusters – if you have different aspects to the focal design (e.g., water purification, shelter, etc.)
- d. Criteria for evaluation (attributes – let us hold off on technical specifications for now)
- e. Importance of criteria
- f. Ranking of ideas on criteria
- g. Summated totals

Continued development of 1-2 concepts moving toward presentable form on the field trip

Field research

- What questions you want answered on the trip
- What stimuli you will show – example concepts but other things as well.

Group Case Analysis – Due Week 13

We will do the attached Voxiva case. I am asking Group 1 to lead the discussion. Each of the other groups (as a group) will provide a 2-page summary covering:

- a. New insights from the case
- b. Applications to your project
- c. Suggestions for their own project

Group Project – Due Week 13

A presentation in class with powerpoint slides that:

Generate more ideas

Elaborate on ideas

Elaborate on your research plan

- i. Whom to talk to, what to see
- ii. Detailed script for interview
- iii. Your group strategies for observing and recording

Things to cover

- a. Ideas
- b. Hybrid versions of ideas
- c. Categorized within clusters – if you have different aspects to the focal design (e.g., water purification, shelter, etc.)
- d. Criteria for evaluation (attributes – let us hold off on technical specifications for now)
- e. Importance of criteria
- f. Ranking of ideas on criteria
- g. Summated totals

Continued development of 1-2 concepts moving toward presentable form on the field trip

Field research

- a. What questions you want answered on the trip – script in detail
- b. What stimuli you will show – example concepts but other things as well
- c. Whom you want to talk to
- d. What you want to see
- e. What are some strategies you will use as a team to observe and record

Assignment 13 – Due Week 14

Write an emersion diary of 2 pages single spaced. Build on your previous bullet points but make it a narrative rather than just bullet points. Submit by

before class.

Essentially here is the question:

You came into this class knowing concepts in your areas of expertise. But with the radically different context of subsistence, are there new concepts that have emerged in your thinking or have you thought about how existing concepts have to be changed or extended?

For example, let us say design – what is unique about designing for subsistence marketplaces?

Marketing – What is unique about communication strategies?

In the emersion phase, we have done a number of things such as cases to provide a basis for your thinking.

Ultimately, the question I want your thoughts on is – how has your understanding of subsistence changed the way you think about your discipline and related disciplines (e.g., marketing and business in general)? What are specific examples of concepts that need rethinking?

Group Project – Due Week 14

- a. Continue to generate ideas – which can be in more focused arenas now
- b. Develop the sequencing, broad questions, and followup questions some more.
- c. Concretize 2-3 concepts in greater detail – it can then be customized to interviewees in different parts of the value chain
- d. Get ready for the next sponsor meeting

BADM 533 - Sustainable Product Design and Business Plan Development

Spring Course Schedule
Monday – 5:00-8:00 pm

Instructor

Madhu Viswanathan

Director for BA 532/533 Course Sequence

John Clarke

The aim of this part of the course is to develop an understanding of a systematic and structured approach for designing sustainable products and developing business plans that address the issues of economic, social and ecological sustainability. This project-based course will serve as a capstone experience in business and engineering that incorporates issues of sustainability at the intersection of these two areas. It will cover conceptual design, system (architectural) design, detailed design, cost modeling, and testing & prototyping methods. In addition, it includes writing project mission statements, business plans, and other related topics at the intersection of business, design, and engineering. The course will overlay traditional product design and business plan development with topics covering sustainable product design, sustainable supply chain management, and design and communication of sustainable value propositions.

The course is a project based experience that will draw from two sets of students. Students who enrolled in the course on sustainable product and market development for subsistence marketplaces in Fall can continue with this course, building on concepts developed in Fall and refined during the international immersion trip over winter break. Students interested in sustainable product design and business plan development may enroll for the spring course as a stand alone learning experience, including second year MBAs students and MS Tech students, subject to availability of space. (Some of these students would have been introduced to the topic through a first year MBA course entitled Sustainable Marketing Enterprises.) For such students, project topics will be chosen that provide opportunities with local entrepreneurs and larger companies. Thus, the course provides an opportunity for learning about sustainable product design and business plan development in resource-rich and resource-poor contexts.

This course together with other current offerings, aims to provide a set of learning experiences for graduate students in business and engineering that lead to integrative understanding of the central role of sustainability and the challenges and opportunities in this arena.

- | | |
|-----------------|---|
| Week 1 (Jan 23) | Introduction to the course Semester Overview Debrief of International Immersion for students from Fall course Brainstorming of project ideas |
| Week 2 (Jan 30) | Guest Speaker Project Team Presentations of possible ideas – (5 min per team up to 15 min discussion) |

| | |
|------------------|--|
| Week 3 (Feb 6) | <p>Overview of product development Concept generation and selection Overview of Market research for concept testing Student presentation of 3-5 Concepts Reading</p> |
| Week 4 (Feb 13) | <p>Customer needs and engineering specs Student presentation of criteria and narrower set of concepts Assignment to develop detailed design/specs Reading</p> |
| Week 5 (Feb 20) | <p>Conceptual Design, Prototyping and Testing Readings Student presentation of chosen concept and results from concept testing</p> |
| Week 6 (Feb 27) | <p>Sustainable product design (Design for replacement, Design for longevity, Dematerialization) Overview of product testing Reading</p> |
| Week 7 (Mar 6) | <p>Product testing Reading</p> |
| Week 8 (Mar 13) | <p>Midterm Presentations Faculty Consulting & Team Meeting Detailed Design Due – PowerPoint presentation and a written report</p> |
| Week 9 (Mar 20) | <p>Spring Break</p> |
| Week 10 (Mar 27) | <p>Financial Modeling and Sustainable Business Plans Reading</p> |
| Week 11 (Apr 3) | <p>Designing Sustainable Supply Chains Reading</p> |
| Week 12 (Apr 10) | <p>Designing and Communicating Sustainable Value Propositions Sustainable Business Plan Development Financial Modeling and Manufacturing Plan Due Reading</p> |
| Week 13 (Apr 17) | <p>Faculty Consulting Sessions</p> |
| Week 14 (Apr 24) | <p>Final Business Proposal Presentation walk through</p> |

Week 15 (May 1) Final Business Proposal Presentations
(Last Class Session)
Written Detailed Business Plan, Prototype, and Engineering Plan
due May 8 by noon
Peer evaluations due May 8

Several guest speakers have been invited to present.

Text and Readings

Chapters from the Ulrich and Eppinger text on product design will be used as readings along with articles available on online reserve.

Articles and cases on online reserve will be used.

Case Studies

In this part of the course, each group will be assigned to lead the discussion on two cases. Their responsibility will be to distribute broad discussion questions and lead the discussion. The class discussion will assume thorough knowledge of the case and focus on analyzing the material and not on describing the facts available in the case. As is clear from the nature of the assignments, everyone is expected to have carefully read each case and analyzed and discussed it with their group members.

The analysis of each case will focus on the following issues:

- Needs Assessment
 - o Specific need being served
 - o Relevant consumer behaviors
- Technology Appropriateness
 - o Why is the technology appropriate & how does it work
 - o Suggestions for improvements
- Engineering Issues
 - o Product Design: comment on design and its innovation
 - o Industrial Design: comment on design and its innovation
 - o Manufacturing Technology: explain and comment
- Recommendations for Design & Development for Subsistence
 - o Specific lessons learnt for group project

Grading

Group Project..... 50%
Class Participation & Assignments..... 50%

Attendance & Participation

50% of the grade for this class is for participation in in-class assignments and discussions, and tutorials. Therefore, attendance is very important and a necessary condition for participation. Students who do not attend class regularly cannot participate effectively and can easily lose one or more letter grades. In-class work will involve presentations and write-ups of cases and other assignments throughout the semester.

Project

The course emphasizes hands-on experience and applications. Therefore, a sizable portion of the grade is for a project where you will design a new product and develop a sustainable marketing plan. You will work in a group which will serve as a resource for completing several assignments and a final presentation and written report. Each

individual's contribution to his/her group will be assessed by peer evaluation. The peer evaluation form is attached to the end of this handout. A deduction in the points earned for group assignments will be made in proportion to the group peer evaluations. This often leads to reduction of an individual's overall grade by one or more letter grades. Free riding will be identified & penalized in this course.

Grading

The two most important aspects for grading are in-class work and participation in the group project. Therefore, lower performance in class work (i.e., missing class-work for more than 1 class) or in participation in group work (as indicated by peer evaluation below 100%) can lead to reduction in overall grade by one or more letter grades.

Group Projects deliverables and deadlines

Mission Statements, Business Plan & Project Schedule

At this stage, the project team delivers its missions statement and preliminary business plan. This includes figuring out the purpose of their existence as a start-up company, identifying major stakeholders, target markets, and milestones.

Conceptual Design

The aim of this stage is to develop sketches of the one or two most promising alternative solution concepts.

Detailed Design

In this stage, your conceptual design is to be detailed by providing detailed drawings, engineering specifications, material selection, and preliminary cost analysis.

Financial Modeling and Manufacturing Plans

Development of Prototype and Business Plan

Appendix

Relevant Readings on Subsistence Marketplaces

Understanding Low-Literate Consumer Behavior – Weeks 1-5

Viswanathan, Madhubalan, Jose Antonio Rosa, and James Harris (2005), "Decision-Making and Coping by Functionally Illiterate Consumers and Some Implications for Marketing Management," *Journal of Marketing*, 69(1), 15-31.

Viswanathan, Madhubalan, S. Gajendiran, and R. Venkatesan (2008), *Enabling Consumer and Entrepreneurial Literacy in Subsistence Marketplaces*, Dordrecht: Springer.

Gau, Roland, and Madhubalan Viswanathan (2008), "The Retail Shopping Experience for Low-Literate Consumers," *Journal of Research for Consumers, Issue 15, Consumer Empowerment Special Issue*.

Understanding Subsistence Marketplaces – Weeks 1-5

Viswanathan, Madhubalan (2007), "Understanding Product and Market Interactions in Subsistence Marketplaces: A Study in South India," in *Product and Market Development for Subsistence Marketplaces: Consumption and Entrepreneurship Beyond Literacy and Resource Barriers*, Editors, Jose Rosa and Madhu Viswanathan, Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, 21-57, Elsevier.

Viswanathan, Madhubalan, Jose Antonio Rosa, and Julie Ruth, "Exchanges in Marketing Systems: The Case of Subsistence Consumer Merchants in Chennai, India," *Journal of Marketing*, 74 (May), 1-18.

Viswanathan, Madhubalan, Srinivas Sridharan, Robin Ritchie, Srinivas Venugopal, and Kiju Jung "Marketing Interactions in Subsistence Marketplaces: A Bottom-Up Approach to Developing Public Policy".

Research Methods in Subsistence Marketplaces

Viswanathan, Madhubalan, Roland Gau, and Avinish Chaturvedi (2008), "Research Methods for Subsistence Marketplaces," in *Sustainability Challenges and Solutions at the Base-of-the-Pyramid: Business, Technology and the Poor*, Editors Prabhu Khandachar and Minna Halme, Greenleaf Publishing, Sheffield, UK, 242-260.

Product Development for Subsistence Marketplaces

Donaldson, Krista (2006), "Product Design in Less Industrialized Economies: Constraints and Opportunities in Kenya," *Research in Engineering Design* 17(3), 135-155.

Green, M., Linsey, J., Seepersad, C., Wood, K., and Jensen, D. (2006), "Frontier

Design: A Product Usage Context Method," *Proceedings of the ASME Design Engineering Technical Conference*, Philadelphia, PA: Paper Number: DETC/DFM 2006-99608.

Viswanathan, Madhubalan, and Srinivas Sridharan, "Product Development for the BoP: Insights on Concept and Prototype Development from University-Based Student Projects in India," *Journal of Product Innovation Management*, *Forthcoming*.

Viswanathan, Madhubalan, Ali Yassine, and John Clarke, "Sustainable Product and Market Development for Subsistence Marketplaces: Creating Educational Initiatives in Radically Challenging Contexts," *Journal of Product Innovation Management*, *Forthcoming*.

Marketing and Management for Subsistence Marketplaces

Sridharan, Srinivas, and Madhubalan Viswanathan (2008), "Marketing in Subsistence Marketplaces: Consumption and Entrepreneurship in a South Indian Context," *Journal of Consumer Marketing*, *Special Issue on Base of the Pyramid Research*.

Viswanathan, Madhubalan, Srinivas Sridharan, and Robin Ritchie (2008), "Marketing in Subsistence Marketplaces," in *Alleviating Poverty Through Business Strategy*, Editor, Charles Wankel, Palgrave Macmillan, 209-231.

Viswanathan, Madhubalan, Anju Seth, Roland Gau, and Avinish Chaturvedi (2009), "Internalizing Social Good Into Business Processes in Subsistence Marketplaces: The Sustainable Market Orientation" *Journal of Macromarketing*, 29, 406 - 425.

Viswanathan, Madhubalan, and Srinivas Sridharan (2009), "From Subsistence Marketplaces to Sustainable Marketplaces: A Bottom-Up Perspective of the Role of Business in Poverty Alleviation," *Ivey Business Journal*, *March/April*.

Viswanathan, Madhubalan, Srinivas Sridharan, Roland Gau, and Robin Ritchie (2009) "Designing Marketplace Literacy Education in Resource-Constrained Contexts: Implications for Public Policy and Marketing," *Journal of Public Policy and Marketing*, 28 (1), 85–94.

Weidner, Kelly, Jose Antonio Rosa, and Madhubalan Viswanathan (2010). "Marketing to Subsistence Consumers: Lessons From Practice," *Journal of Business Research*, 63(6), 559-569.

Viswanathan, Madhubalan (2010), "A Micro-Level Approach to Understanding BoP Markets," *Next Generation Business Strategies for the Base of the Pyramid: New Approaches for Building Mutual Value*, Editors, Ted London and Stuart Hart, FT Press.

Relevant Readings on Product Development

Ulrich, Karl T. & Steven D. Eppinger. "Ch. 4: Identifying customer needs." *Product Design and Development (4th ed.)*. McGraw-Hill, 2008. 53-70.

Ulrich, Karl T. & Steven D. Eppinger. "Ch. 5: Product Specifications." *Product Design and Development (4th ed.)*. McGraw-Hill, 2008. 71-96.

Ulrich, Karl T. & Steven D. Eppinger. "Ch. 6: Concept Generation." *Product Design and Development (4th ed.)*. McGraw-Hill, 2008. 97-122.

Ulrich, Karl T. & Steven D. Eppinger. "Ch. 7: Concept Selection." *Product Design and Development (4th ed.)*. McGraw-Hill, 2008. 123-141.

Urban, Glen L. and John R. Hauser. "Ch. 5: Idea Generation." *Design and Marketing of New Products*. Prentice Hall, 1993. 117-161.

Urban, Glen L. and John R. Hauser. "Ch. 7: Customer Measurement-A Review." *Design and Marketing of New Products*. Prentice Hall, 1993. 176-199.

Urban, Glen L. and John R. Hauser. "Ch. 8: Perceptual Mapping: Identification of Strategic Benefits." *Design and Marketing of New Products*. Prentice Hall, 1993. 201-220.

Urban, Glen L. and John R. Hauser. "Ch. 9: Customer needs and perceptual mapping: Methods and Procedures." *Design and Marketing of New Products*. Prentice Hall, 1993. 222-251.

Urban, Glen L. and John R. Hauser. "Ch.6: An Overview of the Design Process." *Design and Marketing of New Products*. Prentice Hall, 1993. 164-174.

Ulrich, Karl T. & Steven D. Eppinger. "Ch. 11: Design for Manufacturing." *Product Design and Development*. McGraw-Hill, 2008. 209-243.

Ulrich, Karl T. & Steven D. Eppinger. "Ch. 12: Prototyping." *Product Design and Development (4th ed.)*. McGraw-Hill, 2008. 245-265.

Relevant Readings on Marketing and Management for Non-Business Students

Boone, Louis E. & David L. Kurtz. "Ch. 13: Marketing Channels and Supply Chain Management." *Contemporary Marketing*. Thomson South-Western, 2006. 416-440.

Boone, Louis E. & David L. Kurtz. "Ch. 15: Integrated Marketing Communications." *Contemporary Marketing*. Thomson South-Western, 2006. 482-512.

Kotler, Philip. "Ch. 1: Marketing in the Twenty-First Century (excerpt)." *Framework for Marketing Management*. Prentice Hall, 2001. 1-16.

Kotler, Philip. "Ch. 5: How and Why Consumers Buy (excerpt)." *Framework for Marketing Management*. Prentice Hall, 2001. 88-102.

Winer, Russell S.. "Ch. 11: Pricing." *Marketing Management*. Prentice Hall, 2000. 293-324.

Winer, Russell S.. "Ch. 4: Marketing Research." *Marketing Management*. Prentice Hall, 2000. 75-104.

Winer, Russell S.. "Ch. 5: Consumer Behavior and Analysis." *Marketing Management*. Prentice Hall, 2000. 107-139.

Winer, Russell S.. "Ch. 8: Communications and Advertising Strategy." *Marketing Management*. Prentice Hall, 2000. 193-230.

NONDISCLOSURE AGREEMENT
For Sustainable Product and Market Development for Subsistence Marketplaces Course

CONFIDENTIALITY:

By my signature below, I confirm my obligation to keep confidential certain proprietary information, as described below, that I may receive or have access to in connection with my performance of the work required for the above-referenced course during the period of August, 2011 to May, 2012.

Confidential Information shall include:

- (1) Business and technical information disclosed by Corporate Sponsors for my Project or for any of the Class Projects
- (2) My Project results and reports (unless specific permission is obtained for release to third parties) and other student class results and reports

I agree that all Confidential Information shall be maintained in trust and confidence and shall not, directly or indirectly, be disclosed, except as permitted under this Nondisclosure Agreement. I also agree to use all reasonable diligence to prevent disclosure of the information to any third party that is not under an obligation of confidentiality with respect to such Confidential Information to the University or to Corporate Sponsor and to refrain from using the Confidential information for any purpose other than for this Class.

I understand that I do not have any obligation of confidentiality with respect to any information that:

- (a) Was already in my possession on a non-confidential basis prior to receipt from the University; or
- (b) Is in the public domain by public use, general knowledge or the like, or after disclosure hereunder, becomes general or public knowledge through no fault of mine; or
- (c) Is properly obtained by me from a third party not under a confidentiality obligation to the University; or
- (d) Is explicitly approved for release by written authorization of the University.

I understand that my obligations under this Nondisclosure Agreement will continue after this class has ended.

ACKNOWLEDGED AND AGREED:

Date

**ACKNOWLEDGEMENT OF ASSIGNMENT OF INTELLECTUAL PROPERTY
For
Sustainable Product and Market Development for Subsistence Marketplaces**

ASSIGNMENT OF INTELLECTUAL PROPERTY

The *General Rules Concerning University Organization and Procedure*, can be found at <http://www.uillinois.edu/trustees/rules.cfm>.

Article III, Section 5 of the *General Rules* covers ownership of intellectual property.

“Except as otherwise specified in this Article or by the University in writing, intellectual property shall belong to the University if made: (1) by a University employee as a result of the employee's duties or (2) through the use by any person, including a University employee, of University resources such as facilities, equipment, funds, or funds under the control of or administered by the University.”

This course, including the trip to India, was developed with, and is offered to Students through the use of significant University resources. Therefore, the University owns the intellectual property, such as the inventions resulting from your work in this Project.

I agree, upon request, to execute an assignment document transferring ownership in such intellectual property to the University.

ACKNOWLEDGED AND AGREED:

Date

Course Agreement

This is to state that, by enrolling in this course on Product and Market Development for Subsistence Marketplaces for 2011-12, I agree to abide by all the rules and procedures described in the course outline and explained during communications about the course in the preceding semester and during the first class by Professor Madhu Viswanathan. These rules and procedures include but are not restricted to those relating to intellectual property, grading, and participation in the field trip.

Name _____

Signature _____

Date_____