

**Manufacturing and Service Operations Strategy**

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**To Whom:**

- This course will be beneficial to those who would like to work in a manufacturing / operations environment and those who seek consulting job opportunities in this area

**Requirement (Desirable):**

- Real interest in understanding manufacturing and operations in the emerging competitive business environment

**Course Design:**

- The course is designed in five modules. A brief description of the modules is given below.

**Module 1 – Linkages between operations and competitive strategy**

- Defined competitive position and implications to operations
- Excellence in operations and its implications to redefine competitive positioning.

**Module 2 – Tactical Decisions**

- Decisions related to managing set of time, sourcing and scheduling in the overall context of competitive positioning of operations.

**Module 3 – Elements of Operations Strategy**

- Issues related to the capacity, facilities, planning systems, technology management, HR interfaces, quality, information technology, degree of vertical integration, emphasis on new product development
- Factory within factory, lean manufacturing systems, total quality management, total productive maintenance and six sigma
- Implementation experience of operations strategy enablers in the Indian context

**Module 4 – Competing Through Operations**

- Flexibility, Agility, Quality and Innovation enabled operations.
- Mass Customization and its Limitations

**Module 5 – Emerging Scenario**

- Green Manufacturing
- Managing global facilities

## **Pedagogy**

The course would be an appropriate mix of case discussion, invited presentations, factory visits, presentations/assignments by participants based on secondary and primary information.

## **Evaluation**

The participants would work in group of size 5 to track the journey of an organization in enhancing its operations competitiveness. There will be periodical reviews on the project report. The final course grade would consider the following components.

- In-class examination – 30%
- Class preparation and participation - 20%
- Project – 50%

## **Text:**

1. Hayes, Robert H., Gary P. Pisano, David M. Upton, and Steven C. Wheelwright. *Operations, Strategy, and Technology: Pursuing the Competitive Edge*. Hoboken, NJ: Wiley, 2005. (Herein referred as HPUS, 2005)

## Session by Session Plan

### Module 1 – Linkages between operations and competitive strategy

**Session 1      22/12/2015 Tuesday (10.20-11.35)**

Topic: Course Introduction

Case: Cocubes.com (Connecting.Colleges.Companies(IIMB Case,IMB 429)

Reading: HPUS, 2005 *Chapter-2 Operations, Strategy, and Technology: Pursuing the Competitive Edge*. Hoboken, NJ: Wiley, 2005.

**Session 2      23/12/2015 Wednesday (10.20-11.35)**

Topic: Process Product Matrix- Lecture cum Discussion

**Session 3      28/12/2015 Monday (10.20-11.35)**

Topic: Operations and Competitive Strategy

Case: Emirates Airline: Connecting the Unconnected (HBS Case-9-714-432)

Reading: HPUS, 2005 *Chapter-2 Operations, Strategy, and Technology: Pursuing the Competitive Edge*. Hoboken, NJ: Wiley, 2005.

**Session 4      29/12/2015 Tuesday (10.20-11.35)**

Topic: Operations and Competitive Strategy

Case: Dabbawallahs of Mumbai (IVEY 9B04D011)

**Session 5      30/12/2015 Wednesday (10.20-11.35)**

Topic: Operations and Competitive Strategy

Reading 1: Process oriented approach to waiting line management in a large pilgrimage Center in India: a case study Ravichandran, N.; I.V.Subba Rao

Reading 2: Logistics Management in Religious Organizations: Managerial Insights  
Dr. S.Venkataranaiah and Mohan Mookan

### Module 2 – Tactical Decisions

**Session 6      04/01/2016 Monday (10.20-11.35)**

Topic: Tactical Decisions: Management of Set of Time

Case: Belle Inc. (UV6976)

**Session 7      05/01/2016 Tuesday (10.20-11.35)**

Topic: Tactical Decisions: Sourcing

Case: Supply Chain Management at Beautiful Bags (UV6956)

**Session 8      06/01/2016 Wednesday (10.20-11.35)**

Topic: Tactical Decisions: Scheduling

Case: Blanchard Importing and Distributing Co. (HBS 9-673-033)

Reading: HPUS, 2005 *Chapter-2*

**Session 9    11/01/2016 Monday (10.20-11.35)**

Topic:            Tactical Decisions: Factory within a Factory  
Case:             Ophthalmic Consultants of Boston and Dr. Bradford J. Shingleton  
                      (HBS 9-608-151)  
Reading:        HPUS, 2005 *Chapter-2*

**Module 3 – Elements of Operations Strategy**

**Session 10    12/01/2016 Tuesday (10.20 – 11.35)**

Topic:            Capacity Planning  
Case:             Genentech – Capacity Planning, HBS Case 9-606-052  
Reading:        Gary Pisano: Can Science Be a Business? Lessons from Biotech, HBR,  
                      October, 2006

**Session 11    13/01/2016 Wednesday (10.20 – 11.35)**

Topic:            Vertical Integration  
Case:             Sensormatics Electronics Corporation, HBS Case 9-681-095  
Reading:        Chapter -4, HPUS, 2005

**Session 12    18/01/2016 Monday (10.20 – 11.35)**

Topic:            Lean Operations Strategy  
Case:             New Balance Athletics, HBS Case 9-606-094

**Module 4 – Competing Through Operations**

**Session 13    19/01/2016 Tuesday (10.20 – 11.35)**

Topic:            Flexibility  
Case:             Crocs: Revolutionizing an Industries Supply chain Module for competitive  
                      advantage, Stanford GSB Case GS-57  
Reading:        David Upton: The Management of Manufacturing Flexibility, CMR Winter -  
                      1994

**Session 14    20/01/2016 Wednesday (10.20 – 11.35)**

Topic:            Agility  
Case:             Seven-Eleven Japan Co., Kellogg Case KEL 026  
Reading:        Hau Lee: The Triple –A Supply Chain, HBR, October, 2004

**Session 15    27/01/2016 Wednesday (10.20 – 11.35)**

Topic:            Quality  
Case:             Steinway & Sons (HBS 9-682-025)  
Reading:        Eight Dimensions of Quality

**Session 16    01/02/2016 Monday (10.20 – 11.35)**

Topic:            Innovation  
Case:             TELCO's Small Car, Asian Case Research Journal  
Reading:        Nanovation: How A Little Car, Freiberg, Jackie, Dunston, Dain, Kevin – 2010,  
                      Penguin India

**Session 17      02/02/2016 Tuesday (10.20 – 11.35)**  
Topic:            Mass Customization  
Case:            "Mi Adidas" Mass Customization Initiative (IMD 159/POM249)  
Reading:        1. James H Gilmore and B. Joseph Pine II, "Four faces of Mass Customization" HBR (1997)  
                     2. B. Joseph Pine II, Bart Victor, and Andrew C. Boynton, "Making Mass Customization Work" HBR (1993)  
                     3. Paul Zipkin, "Limits of Mass Customization" (MIT Sloan Review) 2001

## **Module 5 – Emerging Scenario**

**Session 18      03/02/2016 Wednesday (10.20 – 11.35)**  
Topic:            Green Manufacturing  
Case:            Australian Paper Manufacturers (A), HBS Case 9-691-041

**Session 19      08/02/2016 Monday (10.20 – 11.35)**  
Topic:            Global Manufacturing Strategy  
Case:            Shanghai GM's Marketing Strategy for the China Market, Asian Case Research Journal

**Session 20      09/02/2016 Tuesday (10.20 – 11.35)**  
Topic:            Course Review and Reflections.