Operations Management: Contemporary Concepts and Cases
Entering the Era of Agility Based Collaboration
(A Syllabus)

Just to say hello: "Welcome to the Operations Management Class. I am your Instructor."

Instructor:
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Class Sessions:
Friday: 07.00 - 09.30 AM
Consultation Time:
Friday (after class) or by appointment

Overview

Today’s leading-edge organizations (both public and business) have a new core competency: the ability to deal with dynamic changes (changeability or agility). Real-time (proactive and interactive) strategic change compels agile organizations to think and act as if the future were now— to engage entire organizations in the real-time strategic thinking and smart actions required to create rapid and sustainable change. A proactive and interactive system (real-time) would try to change (to revise) the existing system and other systems in its environment even if the equilibrium with those interpenetrating systems had not been disturbed first. In striving for increased productivity and improved stakeholder value, agile organizations are taking a more strategic approach to their operations management system and the workplace (quality of worklife & quality of life). To keep us abreast of this change in corporate thinking, this course—Operations Management—discusses the current state of global strategic and tactics of operations management practices by designing smart and challenging research projects.

"The Grand Paradigm of Operations Management is Agility."

"There is nothing permanent except change."
(Change Management)
--Greek Philosopher Heraclitus, 500 B.C.--

"Real-Time strategic change begins with throughput, rather than inputs."
(Professional Management)
--UK Singh and B. Narayal--

"The key to the design of the new working environment is productivity—of both workers and, just as significantly, of space."
(Corporate Real Estate Asset Management or CREAM)
--Jim Service AM--

"Productivity is all the actions that bring a company closer to its targets"
(Performance Management)
--Richard B. Chase, Nicholas J. Aquilano, and F. Robert Jacobs--

"Doing a good job (via Operations Management) is the best marketing"
(Relationship Management)
--Jim Blaschke--

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1. Introduction

Globalization is surely one of the most powerful and pervasive influences on nations, businesses, workplaces, communities, and lives in the third millennium. Information Technology (IT), super highway (cyberspace) communication, travel, and trade that link the world (boundarylessness) are revolutionary in their impact. Globalization is a process of change stemming from a combination of increasing cross-border activity and IT enabling virtually instantaneous communication worldwide. And it promises to give everyone everywhere access to the world's best. In addition, agile organizations (manufacturing, services, and public) want to build and to manage B-I-W (Best-in-World) through OM (Global Operations Management). As a part of Global Management, OM wants things (smart organization activities) the right efficiency and effectiveness; but it also wants the same service everywhere (the combination of value-added and value-in-use processes in their virtual factories, virtual offices, and virtual fields. "World Class Organization through operational excellence" is a play on word suggesting both the need to meet of social class defined by its ability to command resources and operate beyond borders and across wide territories (New Paradigm of Operations Management).

2. Looking Forward of Operations Management: Five Managing Ongoing Smart & Agile Activities

Operations, programs and projects differ primarily in that operations and programs are ongoing and repetitive while projects are temporary and unique (PMBOK, 1996).

By definition, on going operations is the creation of goods and services (Heizer and Barry, 2005). Operations Management (based on the Agility Paradigm) is the set of five managing smart activities and events that creates goods and services through the transformation of inputs into outputs (the value-added process) and the conversion of outputs into outcome (the value-in-use process) that take place to achieve the long-term mutual relationships — “the relationships as assets” approach takes courage, discipline, and planning, but the fact is that today’s business relationships can be systematically defined, nurtured, and developed (Heizer and Barry, 2005 with modification).

Program is an endeavor of considerable scope encompassing a number of project—consist of several interrelated projects. (PMBOK, 1996 and Davis, et.al., 1999).

Program management is the management of a related series of project executed over a broad period of time, and which are designed to accomplish broad goals, to which the individual project contributes (PMBOK, 1996). Program Management is a broad period of time of Process Management +/- Management By Project +/- Multiple Project Management +/- Operations Management.
3. **Objective of the Course**

**(Operations Management):**

*At the conclusion of the course, a student should be able to do the following:*

1. Explain the right concepts of Operations Management and design a system of Global Operations Management for a given manufacturing, service or public which meets the criteria of FRO and FLO (The Agile Organization)

2. Identify and differentiate strategic decisions from tactical decisions in Operations Management.

3. For a given service, manufacturing, project/program, and public (entering the era of autonomy and real total reformation) organization, differentiate
alternative methods of securing a competitive and parenting advantage through OM.


4. What is Operations Management?

Operations Managers should be the Entrepreneurs. Entrepreneurs innovate. Innovation is the specific instrument of operations management. Innovation, indeed, creates a resource, specifically intellectual human resources. The term “Operations Management” (OM) in the general sense implies the broad managerial, human approach, and technical approaches used to manage repetitive (program) and/or non-repetitive work (project) within the constraint of time, cost, and performance targets. Other terms, which imply the use of OM techniques and methods, include private and public management.

Operations Management (OM) originated in the “advanced technology” areas, but it has recently been recognized that the application of OM methods cannot be limited to advanced technology work. EM methods have proven very useful in “soft” sciences such as sociology, psychology, education, and management. OM has been demonstrated to improve the chances of successfully completing work effort on time, within cost target, and meeting performance criteria. It can be profitably applied to any non-repetitive, clearly definable task, including such activities as making motion pictures; conducting social welfare programs; performing all forms of research; putting on plays, seminar/symposiums, athletic events, concert and speaking tours; as well as the more traditional construction, engineering, and product development efforts.

5. Need for Operations Management

OM as it is practiced today was developed in both private and public environment, but it now applied in a wide variety of areas (including manufacturing, service, project, program, property, and public management). Most entrepreneurs start with training in the information technology of their business entities (organizations), but frequently lack an understanding of the managerial functions necessary to manage organization work well. Thus, in defining the tasks of an innovator, a general understanding of the appropriate technical area must assumed, while the tasks unique to operations management concentrate on managerial requirement. As OM has become more important, complex, and critical to our society, the need has arisen for high quality, specially prepared innovators (operations managers) to lead these organizations. Managing business entities mean managing conflicts, dynamics leader-TEAM relationship, risk/uncertainty, changes and cultural diversity.
6. **Paper Idea Generation:**
**Discussion and Presentation**

The replica study should make use of the concepts presented in the class with respect to the various international topics. Where appropriate, the research idea generation should also draw upon concepts presented in the textbook, which are not emphasized in class discussions.

In addition to analyzing Operations Management research topics, the presentation should make recommendations for modification where appropriate (a replica study). In general, the presenter should develop the point of view of OM research idea (idea generation). The research idea presentations will be graded on organization, thoroughness, and insightfulness of analysis/recommendations and oral communication skills (in English).

7. **Topics/Assignment Schedule:**

The following topics/assignments will be discussed as indicated. The course syllabus provides a general plan for the course; deviation may be necessary.

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<td>Group Discussion of RA1 Product Design &amp; Process Selections RA 2: Servitisation QUIZ 1</td>
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<td>Discussion of RA3 Computer Lab. Assignment 1: SQC/SPC Managing Quality &amp; Quality Control and Improvement QUIZ3 RA 4: ODF &amp; HOQ</td>
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<td>7.</td>
<td>Discussion of RA 6 &lt;br&gt;Computer Lab. Assignment: Forecasting &lt;br&gt;Take-home midterm exam &lt;br&gt;QUIZ 6</td>
<td>RGS: 11&lt;br&gt;Take-home midterm exam</td>
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<td>Midterm Evaluation &lt;br&gt;Computer Lab. Assignment &lt;br&gt;Facilities and Aggregate Planning &lt;br&gt;Reading Assignment 7: Capacity Management &lt;br&gt;QUIZ 7</td>
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<td>Reading Article 10: Effective Project Management &lt;br&gt;Computer Lab. Assignment: Independent Inventory &lt;br&gt;QUIZ 10</td>
<td>RGS: 15&lt;br&gt;RA 10</td>
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<td>Materials Requirements Planning (MRP) &lt;br&gt;Reading Article 11: Operational Excellence &lt;br&gt;QUIZ 11</td>
<td>RS: 16&lt;br&gt;RA 11</td>
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<td>Just-in-Time and Lean Thinking &lt;br&gt;Reading Assignment 13: World-Class Company &lt;br&gt;QUIZ 12</td>
<td>RGS: 17&lt;br&gt;RA 16</td>
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<td><strong>FINAL EXAM + Submit Individual Paper</strong></td>
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8. Grades:

Midterm Exam: 25%
(In-class Exam)
Final Exam: 25%
(In-class Exam)
Computer Lab. Assignment & Quiz 15%
Group Presentation (IP) 10%
Class Participation (SCL) 10%
Individual Paper 15%

A: >90; A-: 80≤Grd≤90; B+: 75≤Grd<80; B: 70≤Grd<75; B-: 65≤Grd<70;
   C: 65<Grd≤60; D: 56<60; F<56.

9. Text Books:

Roger G. Schroeder. 2007. Operations Management: Contemporary
   Textbook

Current issues of Operations Management Journal as they are published
during the course (four articles of new frontiers of Operations Management,
three research articles, two integrated cases of OM).

Additional texts, case studies, articles, and appropriate software will be made
available to the class to support the research proposal discussion and
presentation.

10. Credo:

"Promote the good and prevent the bad (Prophet SAW)",
Change is the destination,
Transition is the journey.
Unless transition occurs, change will not work,
Change + Human Beings = Transition
(William Bridges)
Entering the Fifth Generation of Global Management Evolution by developing the Red and
White Management (Total Quality of Indonesian Management or TQIM, WSC): Managing with
Courage and Honesty.

Jogjakarta: August 17, 2006

Instructor:

Wakhid Slamet Ciptono
131, 803. 529
*) Dedicated to my cute son and daughter: Sylvano ACC. & Yurivani Amanda Bonita & my wife with sharing, caring
and daring of the red and white smart life and love.

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ABOUT THE LECTURER

Wakhid S. Ciptono, a lecturer and a researcher at the Faculty of Economics and The Master of Management, Magister Sains, and Magister Ekonomika Pembangunan (MM/M.Si/MEP) Program, Gadjah Mada University, Jogjakarta, MM-UNSOED, MM-Bank BNI, MM-Bank EXIM, MM Pelindo Medan in the areas of Operations Management, Operations Research/Management Science, Project & Program Management, Property (Real Estate)/Asset Management, Entrepreneurship Management, International Operations Management, and Strategic Management. He is also the instructor of some T&D Programs which are held by Pertamina (Suskapim), Perhutani (KPL), Depdagri (PMSES/PKL), Depdagri dan Depkeu (PBB Untuk Camat Se Indonesia), Perumka, PT, TELKOM, Depkop, Deperindag, Perum, Pegadaian, PT, PELINDO III, Perum, Angkasa Pura I, and PDAM. He is one of the founders of Small Business Development Program (SBDP) of Gadjah Mada University (1989). He is the Former Director of Research and Development "PPM" Faculty of Economics, Gadjah Mada University (April 1st, 1999 – February 14th, 2002). He is also the Former Director and Project Manager of Project Implementation Unit (PIU) Gadjah Mada University (January 1st, 2005-April 1st, 2006). He is still working-in-process to pursue his Ph.D. at the Faculty of Business and Accountancy, University of Malaya, KL, Malaysia. He is very interested in developing small/medium business and entrepreneurship, especially to support the government as it enters the era of Total Accelerated Transformation Program (from May, 21st 1998 to 2020), the era of AFTA 2010, and the era of WTO (2020). He obtained his Certificate of Mathematics from the Public Institute of Education, Jogjakarta (1982); graduated from the Department of Management, Faculty of Economics, Gadjah Mada University, Yogyakarta (1987). He was completing both the MBA (in International Operations Management, Strategic Management, and Global Entrepreneurship Management) and MPM (Masters in Project/Program Management) at Western Carolina University, North Carolina, USA, 1993. He is an active member of Production and Operations Management Society (POMS), Operations Research Society of America (ORSA/TIMS), Project Management Institute (PMI), Small Business Development Association of America (SBIDA), The Association for Total Cost Management (AACE International), and Association of MBA Executives, and Service Operations Management Association (SOMA). He has been presenting around 30 papers in the international conference, workshop around the world.

That's all. Try to do your best and have a nice class.
Good luck and God blesses you all.

If there is a will, there is a win.
Acting on a good idea is better than having a good idea (Robert Half)
(The Spirits of OM)