管理科学专业

MBA专业精品教材







M. 泰雷兹·弗莱厄蒂 (M. Thérèse Flaherty)

(英文版)

Global Operations Management



M. Thérèse Flaherty: Global Operations Management

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出版者的话

在全球经济一体化的激烈竞争格局中,中国正处于前 所未有的经济与产业结构调整与转型的关键时期。飞速发 展的社会与错综复杂的变革要求我们的经济与管理水平有 一个飞跃。

为了能让读者系统地学习、借鉴国际上先进的管理理论、方法和手段,机械工业出版社从一些世界著名出版公司引进了一批一流品质的经济管理名著,组成了这套《世界经济管理文库》。其中所选图书均为当前国际上最为流行和权威的教材,大部分多次修订重版,有的多达十几版。作者都是哈佛、芝加哥、斯坦福等著名商学院的教授,使您足不出国,便可领略世界知名学府的文化精粹。

为了给中国的MBA教学提供一套完整的MBA系列教材,继与清华大学经管学院、加拿大毅伟管理学院合作共同策划出版的《国际通用MBA教材》与《国际通用MBA教材配套案例》丛书之后,近期,我社又和中国人民大学工商管理学院联手,共同策划本套《MBA专业精品教材》丛书。《国际通用MBA教材》涉及了所有的MBA核心课程,而本套《MBA专业精品教材》包括了MBA各个不同专业方向的全部课程及选修课程,它为各类工商管理学院培养更适

合社会需要的专门管理人才提供了丰富的教材资源库。全 套丛书按专业分类,包括经济学、战略管理与组织、管理 科学、财务与金融管理、会计、市场营销、商务技能等7大 系列、60多个品种。

为了保持原作的原汁原味,这套丛书是以英文原版的 形式出版的。这样可以避免因翻译而造成的歧义和出版时 间的滞后,以便让读者能亲身体味原作者的精彩文风,并 在第一时间洞悉经济管理学科各个领域的最新学术动态。

由于作者所处的社会、政治环境的不同,书中所述难免有不妥之处,请读者在阅读时注意比较和鉴别,真正消化吸收其中的精华,这也就达到了出版者出版本套丛书的目的。我们真诚地希望这套《世界经济管理文库》的出版,能为提高中国的MBA教学水平、推动中国的改革开放事业尽点绵薄之力。

机械工业出版社 1998年8月

序言

当前,我国正处于知识经济初露端倪的时代,管理科学已经成为兴国之道,这给我国工商管理教育带来新的机遇与挑战。今年9月,又将有4000余名工商管理硕士生满怀着理想与希望进入各大学学习。一大批机关分流干部与经贸委系统的管理人员也要经过人学考试,在职学习并申请工商管理硕士学位。如何办好工商管理硕士(MBA)项目,为国家和社会培养出一批又一批符合市场需求的高质量的工商管理硕士,是全国可以授予工商管理硕士学位的56所院校所共同考虑与研究的问题。

在这里,MBA课程设计是成功的关键环节之一。记得在1984年的夏天,在加拿大国际开发总署的资助下,加拿大蒙特利尔大学、麦吉尔大学、康克迪亚大学以及魁北克大学蒙特利尔分校的教授们为中国人民大学的年轻教师讲授了管理经济学、会计学、管理学以及管理信息系统等MBA课程。在1985年夏天,加拿大的教授们又讲了另外4门MBA课程。当时,我并没有真正了解这些MBA课程与我过去所学的管理课程在实质上有多大的区别,也没有理解这些课程之间的内在联系,对于MBA核心课与选修课以及专业的主修与副修的区别与联系更是知之甚少,只是感

到加拿大教授的教学在内容和手段上与我们传统方式有较大的区别。1988年初,我到加拿大麦吉尔大学管理学院研修后,才真正对MBA的课程设计有所了解。此后,我先后到美国布法罗纽约州立大学管理学院与澳大利亚悉尼科技大学管理学院任教,又对MBA课程之间的内在联系有了更切身的体会。为了更好地了解美国MBA教育的新潮流,今年6月,我又随中国管理学院院长代表团考察了美国著名管理学院、出席了在芝加哥举办的"全球管理教育论坛会"。

综观北美的工商管理教育, 在全球化、信息化与整合 化的挑战下, 实在是强调其实用性。纵然有的教授学者看 重自己的象牙宝塔, 勾画着纯理论的模型与理论。但在 MBA的教育上,美国现有的750余所管理学院,特别是为 美国管理学院联合会(The American Assembly of Collegiate School of Business, AACSB) 所承认的300余所管理学院, 培养目标明确、课程设计体现出其为社会需求与市场服务 的宗旨、没有半点的含糊。美国著名的管理院校明确自己 的教育使命, 把视野放在全球与创新上, 不断地迎接新的 挑战,将所授的知识与社会的实际需求密切地结合起来, 期望培养出真正的高质量的管理人才。例如,哈佛商学院 明确地提出, 该院的使命是"影响企业的实践", 培养全面 的管理者 (general managers), 指出 "我们要对企业的领导 人在如何完成他们的工作上, 即在他们如何提出与解决问 题、确定战略方向和采取行动上施加重大的影响。同时, 我们鼓励从实践中获得反馈, 以便了解这些领导人如何在 实践中应用我们的思想与知识,从而进一步发展与提炼我 们的理论与知识。"麻省理工学院斯隆管理学院的使命"尊 重有用的工作","为产业提供服务",提出"作为管理教育 与研究的世界领导者,麻省理工学院斯隆管理学院要培养 能在快速发展与高度竞争的全球企业环境中获得成功的管 理者。当前持续不断的技术创新已成为每个产业各个方面 生产力和增长的关键,因此,这正是我们的时机。"伯克利 加利福尼亚大学商学院从学院的成立始,就将教育的重点 放在国际与企业家的舞台上, 研究迅速发展的全球经济, 为学生提供创新的学习机会。

根据上述的使命,美国著名的管理学院教育模式基本上有三大流派:一是以哈佛商学院为代表的培养全面管理人员的模式。斯坦福商学院的培养方式也是属于这种模式。他们培养的是全面的MBA,而不是专业化的MBA,通过

为学生提供必要的专业知识,使之毕业以后成为企业或其他组织中高层的有效的全面管理者,而不是职能部门的管理人员。二是以芝加哥大学管理学院为代表的培养专业管理人员的模式,其方向是为企业和组织培养专业的管理人员。斯隆商学院亦属于这种类型。三是介于两者之间的模式。美国多数管理院校采用的是这种培养目标,如伯克利商学院、西北大学的凯洛格商学院、洛杉矶加州大学、康乃尔大学管理学院以及杜克大学管理学院等。因此,各个管理学院在其课程设计上有着不同的战略重点。

哈佛商学院MBA课程设计的思路是"在日益增长的全球商务环境中,提高学生进行战略性与关键性思考的能力。"斯坦福商学院MBA课程设计的思路是"确保学生获得管理运行的知识,了解企业运行的经济、政治和社会环境,以及掌握作为管理者所必须的行为技能。"同时,"MBA项目也要设计成为一种可以终身学习的模式。这样,今天的学生将在今后贯穿其事业的复杂而快速变化的管理世界中有能力自如地作出调整。"斯隆管理学院MBA课程设计的思路是"对日益增长的市场全球化和密集的竞争正在改变工作性质的这一事实作出反映。"哥伦比亚商学院MBA课程设计的思路是"让学生掌握作为管理者能够在全球经济中进行有效竞争所需的基本学科与应用的职能领域。"

总之,这些学院在设计MBA课程时,首先,考虑的是学生要了解全球的竞争环境。其次,考虑学院所在的地域和环境。例如,哥伦比亚商学院极其强调该院处于纽约这个金融中心,其战略重点是国际、金融和纽约,培养出的学生要适合在国际大城市从事金融工作。因此,该学院在课程设计上就对财务与金融等相关课程有所侧重。再次,考虑学院自身资源的特点,如斯隆管理学院在技术管理上设置较多的课程,而哈佛商学院则在全面管理与竞争战略课程上有所突出。最后,要使学生获得相关的专业知识,了解研究与实践的前沿,如企业伦理、领导精神、创新、以及企业与政府关系等。

在课程设计的内容上,美国管理学院根据自己的情况,多按传统划分为核心课程与选修课程。课程内容上并不划一,门数上也多少不等。在学习核心课之前,学生要预先学习计算机应用和技能、商务沟通以及基本数量分析方法等课程。在核心课上,各学院基本上开设了经济学、统计或数据分析、会计、财务、市场营销、运作管理、组织行

为、人力资源管理、战略管理以及公共管理等课程。当然, 也有例外。芝加哥大学管理学院就不设置核心课。在选修 课程上,除哈佛商学院外,各学院基本上设置了专业、如 管理经济学 (Managerial Economics)、会计 (Accounting)、 财务管理 (Financial Management)、税收 (Taxation)、管理 科学 (Management Science)、信息系统 (Information Systems)、市场营销 (Marketing)、组织行为学 (Organization Behavior)、人力资源管理 (Human Resource Management)、国际商务 (International Business)、战略管 理(Strategic Management)以及公共管理(Public Management) 等。最具特色的是斯隆管理学院的课程设计。该学院除了 设计出体现管理基础原理和技能的六门核心课以外,根据 学生今后所要从事的工作方向、创造性地设计自我管理模 块(Self Managed Track)与管理模块 (Management Track)。 自我管理模块包括应用宏观与国际经济学、财务管理或财 务理论、信息技术、产业关系与人力资源管理、运作管理 导论和市场营销导论等六门课。如果学生希望将来从事较 为全面的管理工作,则可以选择自我管理模块。而学生希 望成为更专业的管理人员,则可以选修管理模块。在这个 模块中,有六个分模块,即战略管理与咨询(Strategic Management and Consulting)、新产品与风险开发(Product and Venture Development)、信息技术与企业变革(Information Technology and Business Transformation)、金融工程(Financial Engineering)、财务管理(Financial Management)以及制造与 运作(Manufacturing and Operations)。这种设计打破传统职能 性课程的框架,切实反映市场的声音,力图符合具体职业 领域的要求, 使学生能在今后的工作中更快地进入某个具 体的管理角色。

我国工商管理硕士教育总体来说,还处在试点阶段之中。在课程设计上,全国工商管理硕士教育指导委员会规定了核心课的指导大纲。经过多年的建设,MBA核心课的教材已经初步满足教学的需求。当然,在质量上还有待进一步完善。随着MBA教学的深入发展,一些院校在培养全面管理人员的基础上,进一步根据自己院校的区域环境和办学条件,探索开设专业方向,以便培养出更适合社会需要的专门管理人才。这就对课程设计提出了新的要求,希望有更专门化的课程支持不同的专业方向。这不仅对教师的科研提出了更高的要求,而且对教材的建设也提出新的

需求。教材不足便是当前工商管理教育中最大的困惑之一。

为了满足工商管理专业方向的发展以及相应的课程设计,在中国人民大学工商管理学院的策划下,机械工业出版社推出了英文版的《MBA专业精品教材》,填补教学用书中空白,力图缓解MBA各专业教学上的急需。在这套丛书中,我们精心选择了北美在经济学、战略管理与组织、管理科学、财务与金融管理、会计、市场营销以及商务技能等7个专业的英文版教材,期望对国内各管理学院所开设的管理专业有所帮助。同时,有志于学好MBA某个专业的管理人员、研究生甚至本科生也可以通过系统地学习该专业所列的教材,掌握个中三味。

当然, 在学习西方的管理理论与经验时, 需要认真对 待其内在的文化底蕴。正如同样是绘画,西方的绘画注重 光线与颜色, 体现出一种形象思维, 而中国画则注重线条, 体现出内在的逻辑思维,从而表现出中国文化与西方文化 的差异。本世纪初以来,我国知识分子一直在研究与吸收 西方文化、力图西学中用。正如有人所讲、学习的方法有 三种形式, 一是鸟瞰的方法, 二是仰视的方法, 三是平视 的方法。鸟瞰者,持才傲物,看不起其他民族的文化,更 看不起其他民族的管理理念与方法。仰视者, 自卑自弃, 看不起自己民族的文化,盲目追求其他民族的管理理念与 方法。要真正作到西学中用,而不是仅仅学到一些皮毛的 话,则需要运用平视的方法,拉开距离,去观察与学习世 界上一切优秀的管理理念与方法。今天,我们利用西方的 管理理论与实践,是为了更合理地推动中国的管理教学与 科研, 促进中国的管理实践, 切不可邯郸学步, 而是真正 做到"以我为主、博采众长、融合提炼、自成一家"。

第二個神士

中国人民大学管理学教授 中国人民大学工商管理学院院长 全国MBA教育指导委员会委员 1998年盛夏于北京

ABOUT THE AUTHOR

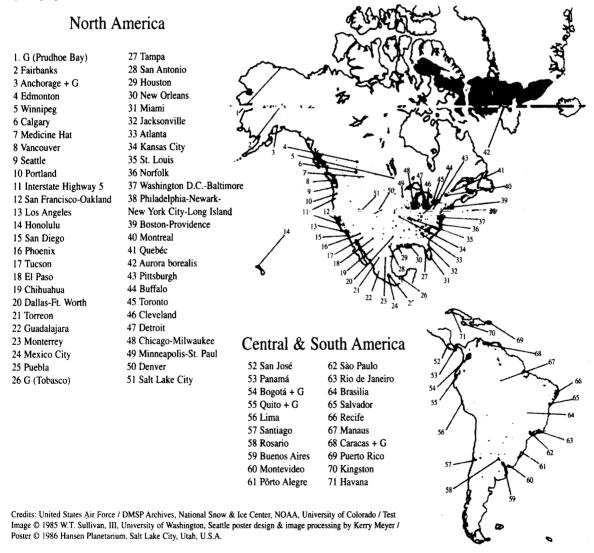
M. THÉRÈSE FLAHERTY is lecturer in the Operations and Information Management Department of the Wharton School of the University of Pennsylvania. She received her B.S. in math and economics from Tufts University, spent a year as a general student at the London School of Economics, and received her Ph.D. from the Graduate School of Industrial Administration of Carnegie-Mellon University. Before joining the Wharton School, she was assistant professor of economics at Stanford University, as well as assistant and associate professor in the production and operations management area at Harvard Business School. Her research for the last ten years has focused on the connections between operations and strategic management, especially in global business.

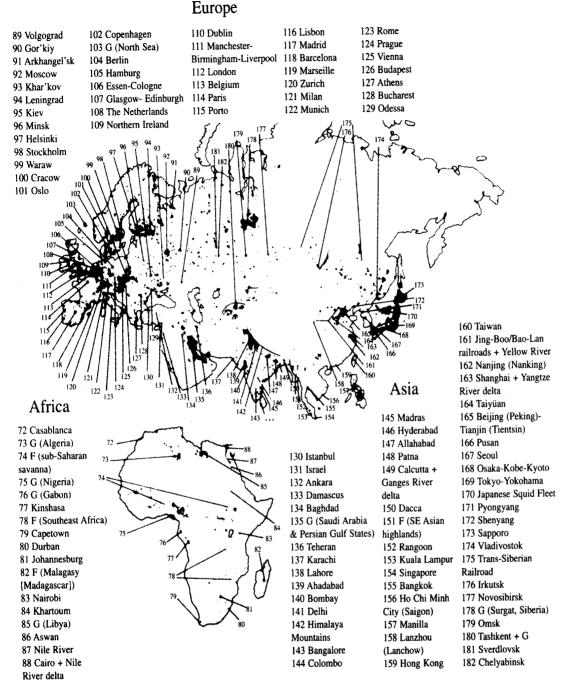
Flaherty began her research, course development, and teaching in global operations management at Harvard Business School, where she wrote many of the cases included in this book. Her publications in global operations include "Coordinating International Manufacturing and Technology," which appears in *Competition in Global Industries*, edited by Michael E. Porter (Harvard Business School Press, 1986). In a related research project, she is studying manufacturing management in 22 Japanese and American integrated circuit fabrication facilities; that project seeks to identify actions managers can take to improve the contribution of their operations to business performance. She is currently a member of the editorial boards of the *Strategic Management Journal* and *Japan and the World Economy*.

ABOUT THE COVER

A tapestry of city lights and rural fires announces our presence on this planet. In contrast to daytime images, where only natural features are easily visible, the activities of humankind at night are readily traced in this mosaic of images from U.S. Air Force weather satellites. Much of the light leakage to space corresponds to street and building lights in urbanized regions, especially in Europe, North America and eastern Asia. Also nicely etched are transportation features such as the Trans-Siberian railroad, the main railroad though central China, the spoke pattern centered on the hub of Moscow, and Interstate Highway 5 along the western coast of the United States. The delimiting effects of geographical features such as the Nile River, the Sahara Desert, the Himalayas, and the Australian Outback are also apparent. In the tropics, the major sources of light are controlled fires—the result of grassland burning, slash-and-burn agriculture, and clearing of forests. The frequency of these fires depends on the season, but in the present image they are prominent throughout the highlands of Southeast Asia, the sub-Saharan savannas, and East Africa. Other lights arise from huge burn-offs of natural gas associated with oil wells. Gas flares show clearly in Indonesia, the Tashkent region of the Soviet Union, Siberia, the Middle East, North and West Africa, and northwestern South America. In the Sea of Japan, the large blotch of light emanates from a fishing fleet that hangs multitudes of lights on its boats in order to lure squid and saury to the surface. The only natural source of light is the aurora over Greenland. Aurorae (Northern Lights) occur when high-energy particles from the sun enter polar magnetic regions, creating currents that cause the upper atmosphere to glow like a giant fluorescent tube.

The image is replete with lessons of geography, economics, anthropology, and environmental science. And for astronomers, who find themselves limited to increasingly remote and expensive sites, it also illustrates their constant battle against the "light pollution" that damages observations of faint stars and galaxies. But is there not a wider loss? The image testifies that hundreds of millions of people today have no dark sky and are thus denied the nighttime universe. No longer do they know the exquisite thrill of a meteor shooting across the sky, nor the humility brought by the resplendence of two thousand stars wreathed by the Milky Way. At a time when survival of our species depends on finding a common vision, we have wrapped Earth in a glowing fog.





Cautionary Notes: There are several aspects of this image that the discriminating viewer should keep in mind. First, it is based on a mosaic of about forty individual photographs, each of which has its own distortions. These photos have been approximately reduced to a common scale, but the final image corresponds to a Mercator projection only to about 5% accuracy. The individual photos were also taken with a variety of exposures and under varying moonlight. Several additional processing steps then led to this poster, with the result that quantitative light intensities in different regions can only be roughly judged. The photos in the mosaic were taken at various times and seasons over the period 1974-84: this affects in particular the occurrence of tropical fires, which are highly seasonal. The aurora included in the image is an artist's rendering based on satellite photography. Its positioning is only meant to be suggestive—aurorae in fact usually occur in a ring centered on the north or south magnetic pole. Finally, although most dark regions are truly lacking light, sections of some photos were clouded out, and suitable photos were not available for a few regions such as many remote islands and portions of South China and southwestern Africa.

Austrailasia

183 Jakarta

184 Northwest Cape

185 Perth

186 Adelaide 187 Hobart

188 Christchurch

189 Wellington

190 Auckland

191 Melbourne

183 184 192 Sydney 193 Brisbane 194 G (Sulawesi, Indonesia)

LIST OF CONTRIBUTORS

Prime Author and Editor: M. Thérèse Flaherty

Wharton School

University of Pennsylvania

Alice Amsden

Massachusetts Institute of Technology

Christopher Bartlett

Harvard Business School

Andrew Bartmess

(formerly Harvard Business School)

Corey Billington

Hewlett-Packard Company

Keith Cerny

McKinsey & Company

Marquise R. Cvar

Independent Consultant

Jill S. Dalby

Harvard Business School

William H. Davidson

University of Southern California

Edward W. Davis

Darden School

University of Virginia

Barbara Feinberg

Independent Consultant

Kasra Ferdows

Georgetown University

Sumantra Ghoshal

INSEAD

Robert W. Haigh

Darden School

University of Virginia

Janice Hammond

Harvard Business School

Ramchandran Jaikumar

Harvard Business School

Laura Kopszak

University of Lausanne

Peter Lawrence

Corporate Design Foundation

Hau L. Lee

Stanford University

Dorothy Leonard-Barton

Harvard Business School

XXII LIST OF CONTRIBUTORS

David L. Levy

University of Massachusetts

Eric Mankin

Integral, Inc.

Kazuhiro Mishina

Japan Advanced Institute of Science and Technology

(formerly Harvard Business School)

Keith L. Paige

Vermont America Corporation

Laurie Poklop

Corporate Design Foundation

Gil Preuss

formerly Harvard Business School

Ananth Raman

Harvard Business School

Christopher Spray

formerly INSEAD

Steven C. Wheelwright

Harvard Business School

Timothy C. Wright

Manor Health Care Corporation

PREFACE

This book supports advanced courses in global operations management and strategy that are now being introduced in many schools of management. Its text, cases, and readings allow students to extend skills from earlier operations management courses, relate recent innovations in global operations management and information technology to global business strategy, and integrate "core" management courses in organization, leadership, strategy, marketing, accounting, and operations. Text and cases draw on the experience of pioneers in global operations as well as research on the opportunities and challenges of implementing global operations strategy. The book focuses on specific areas in which operations has had its biggest impacts on global business performance.

CONCEPTUAL FRAMEWORK

The book builds on the foundations of operations management established in introductory operations management courses, including quality, inventory, materials, and product development. But global operations management goes considerably beyond the issues addressed in introductory operations management courses. The text, cases, and readings address some issues that arise only in international business, such as exchange rate fluctuations, language, and political-cultural-economic differences. They also relate operations management issues to global business strategy.

Because operations management now provides new foundations for global business, many long-accepted strategic assumptions must be changed. The old idea that labor-intensive production should be moved

to industrializing countries while technologically sophisticated operations should stay in industrially advanced countries must be replaced by a new awareness that such decisions require detailed operations and strategic analysis. Supply chains are being shortened in North America, but lengthened globally, requiring global operations managers to face issues that are being eliminated domestically. Operations managers must convince themselves that they can reduce the potentially enormous "hidden" costs of coordination in long, technologically sophisticated supply chains. Even improving operations performance often requires international alliances.

The text reviews the practice of leading globalizing businesses and addresses the challenges facing operations and strategic managers as operations revolutionize global business. The text also provides a new conceptual framework relating operations management to global competition, business strategy, and the political economy.

ORGANIZATION

The book begins, in Chapter 1, by reviewing the history of international business and operations, focusing on the changes in the international political economy and the innovations in global operations management and technology that drive globalization. Chapter 2 describes the changes in business strategy that accompany globalization as well as the opportunities and challenges posed by innovations in global operations.

Chapters 3 through 5 focus on specific areas in which leading companies have succeeded in using global operations to improve global operations and supply chain performance and in creating global operations projects to leverage customer-supplier and subsidiary relations. Chapter 3 illustrates successful approaches to dramatic improvements in operations and business performance. It also relates global business performance to product design, quality management, project management, international partners, and, often, government. Chapter 4 addresses the cutting-edge issues of streamlining value chains, increasing coordination, and improving channel performance. This represents the foundation of the success of companies like Nike, which owns none of its vast international manufacturing network, and Walmart, which grew to become one of the largest companies in North America in the mid-1990s. Chapter 5 focuses on how suppliers, customers, and international subsidiaries work together to create mutual value and trust. One case details the competitive and cooperative mechanisms Japanese customers and suppliers use to build value and trust. Another demonstrates how an Amerian apparel firm and its Taiwanese partner managed a strategic partnership that supported tremendous growth in sales, profits, and capability for both. Still other cases emphasize the challenges managers face in multinational companies as they attempt to create value from their international operations. The readings are classic articles, critical to understanding the emerging issues in global operations management and strategy.

EMERGING COURSES

This book supports courses of several lengths and of different emphases. For example, materials from the book can be used for a semester-long course in global operations management and strategy.

Analytical Methods A global operations course can be enhanced by applying analytical and mathematical methods to cases. The text chapters describe applications of, but do not present in detail, several mathematical and operations research techniques that are proving especially useful in global operations. Furthermore, several cases provide sufficient detail for extensive analyses; the instructor's manual provides suggestions and background. These include: project management techniques, inventory and materials flow models related to global supply chain cases; simulation and mathematical programming models of exchange rate fluctuations related to strategic location cases; and incentive and negotiation theories related to projects "pushing the limits" (as in Chapter 5) of global operations performance.

Longer Courses This book contains materials to support twenty-six sessions: twenty-one case-based discussions plus five lectures, one based on each of the five text chapters. With concluding lecture, student projects, and sessions on the special interests of instructors, there is ample material for a full semester course.

Shorter Courses My own advanced MBA mini-course in Global Operations Management at Wharton is very concentrated, and its purpose is to give students a foundation for continued learning. Of its twelve sessions, only six are case-based; five are lectures based on text chapters, one wraps up the course, and I use one session for conferences on term papers. The material in the book not directly prepared for class is used for in-class examples, problems, and bases for discussion. Additional case materials provides subjects for papers, examples of approaches to similar problems in other industries and business, and a ready reference for those who will work in global operations.

INSTRUCTOR'S MANUAL

The instructor's manual provides a sample detailed week-by-week syllabus, including lecture suggestions, reading assignments, and study questions. It also provides suggestions for course development: outlines and concepts for courses of several lengths, larger contexts relating the