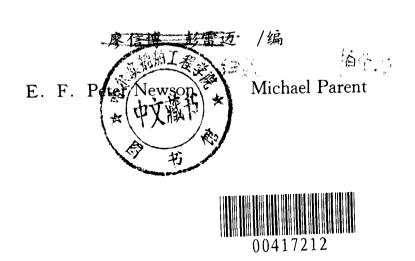


## 国际通用 MBA 教材配套案例

## 管理信息系统案例

(英文版)

# Management Information Systems Cases



机械工业出版社

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## 序 言

我很荣幸有此机会用简短的语言就毅伟管理学院的历史、传统、教职人员和最新业绩向您作一介绍。毅伟管理学院是加拿大西安大略大学(UWO)所属的一所专业学院。作为加拿大历史最悠久的大学之一,西安大略大学目前拥有17个院系和专业学院,座落在加拿大最南部的安大略省伦敦市。这座城市拥有330 000人口,位于多伦多和底特律之间。西安大略大学有26 000多名学生、4 000余名教职员工。毅伟管理学院的本校在安大略省伦敦市,同时在多伦多的密西桑戈设有分校,而且最近在香港也建立了分校。

历史地看,毅伟管理学院一直是管理学界的领导者,现将部分成就列后,标示毅伟管理 学院日新月异的发展:

- 1922年创立了加拿大第一个培养本科生的商学系。
- 1932年开始出版杂志《毅伟商学季刊》。该杂志发行到25个国家,发行量多达10 000册, 深受学术界和管理界读者的喜爱。
- 1948年,在加拿大首次设立行政管理人员培训计划(校方要求任课教师为所有新设立的课程准备案例教材,作为他们职责的一部分)。
- •1948年创立了加拿大第一个工商管理硕士课程。
- 1961年首创了加拿大的第一个商学博士课程。
- 1974年,被联邦政府正式指定为加拿大第一个(现在已发展到8个)国际商业研究中心 (CIBS,即美国CIBERS的前身),联邦外交部对该中心持续提供财政支援。
- 1975年,毅伟管理学院成立了自己的出版社。该部门目前拥有2 000个加拿大的案例, 并成为哈佛案例的加拿大资料交换所。1998年,毅伟管理学院的案例已分销至20多个 国家的100多所学院和100多家企业。毅伟管理学院是全世界管理学案例研究的第二大 制作者,每年向校外读者分销案例教材超过100万册。
- 1978年开始实施第一项国际学生交换计划、目前该交换计划已增至20余项。
- 1984年毅伟管理学院在加拿大联邦政府的支持下,在伦敦市组建国家管理学研究与开发中心的过程中发挥了主导作用。
- 1992年, 毅伟管理学院被选为主导性的国际商学刊物, 即《国际商学研究杂志》在1993年至1997年间的编辑总部。
- 1993年、《加拿大商学》杂志根据由各大聘用公司首席执行官、人力资源管理人员和求职顾问等人士组成的所有评选组得出的全方位评比结果、将毅伟管理学院列为加拿大培养工商管理硕士的最佳学院、并且这一结论被逐年的评比一再肯定。1994年《亚洲企业》杂志又将毅伟管理学院列于亚洲公认的25所世界最佳商学院的行列中。
- 1997年,《国际管理学杂志》将毅伟管理学院评为国际战略管理学文献的主要贡献者,并领先于哈佛大学与西北大学凯洛格商学院。《商业周刊》将毅伟管理学院列为全世界最佳国际商学院之一,和欧洲管理学院(INSEAD)及伦敦商学院(LBS)并列,而且《美国新闻与世界报导》将毅伟管理学院选为全世界在行政管理人员培训计划方面最佳的15所商业学院之一。

至1998年,毅伟管理学院拥有65名全职教授,他们每年负责教授600名普通课程的和在职行政管理人员课程的工商管理硕士生、300名本科生、40名博士生,以及范围宽广的非学位课程。毅伟管理学院的宏伟目标是凭借各种杰出的教学计划和在相关领域中优秀的研究记录,路身于全世界上所最佳商学院的行列中。

在国际上,毅伟管理学院参与主要的海外项目达30年之久,并且最近又参与到亚洲(特别是中国)以及前苏联某些共和国的有关项目之中,这些项目正在为当地的管理学教育事业作出贡献。

#### 中国项目

1984年是毅伟管理学院和中国的清华大学连续合作项目开始的第一年。我们承诺为中国学生来毅伟管理学院学习工商管理学硕士和博士做准备,与访问学者一起工作,提供在中国的短期教学指导,并帮助清华大学经济管理学院培养管理学教师人材。该项目的另一目的是毅伟管理学院借此进一步了解中国和中国的商业活动方式。

在项目的第一期过程中,撰写了35篇论文、案例和教学指南;有9名毅伟管理学院教授参加了短期的访华授课;12名中国访问学者分别在毅伟管理学院工作一年;培养了8名工商管理学硕士毕业生;所有来访的中方人员都参加了撰写案例的工作组。这一项目由加拿大一中国管理学教育计划提供资金。该项目的第二期进一步扩大发展,至1994年,经过五年的努力,已成为毅伟与滑铁卢大学以及中国的清华大学、大连理工大学和东南大学的合资合作项目。毅伟管理学院承诺在进一步提高中国管理学教育能力方面继续提供援助。其要点包括设计、开发并执行1992年8月提出的通过案例教学方法教授合资企业、技术转让以及国际贸易等课程。这一教师培训项目是通过翻译给来自中国各地的教师们进行授课,并且所有教材均已译成中文。

一个大规模的合作出版项目已经开始实施,1992年4月,五卷国际商业案例中的第一卷已在中国由清华大学出版社出版。该系列书籍是毅伟管理学院和清华大学合作的产物,它为中国的经理们和学生们提供了全面的国际性商业案例。1992年~1993年,经我们在大连理工大学和东南大学的伙伴安排,又有6本国际性教科书的中文版通过有关出版社在中国出版。

从那时起,出现了大量由毅伟管理学院发起的有关中国的案例写作,各种书或被重印、翻译或专为中国市场而撰写,我们还在清华大学开设了商学导论课程,进行了教授互访等等。 所有这些都体现出毅伟管理学院决心实现对中国作出的真诚的承诺。

> 唐乐礼 加拿大毅伟管理学院院长 一九九八年六月

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### Preface from The Dean of the Richard Ivey School of Business

It gives me great pleasure to have this opportunity to introduce you to the Ivey Business School by briefly explaining a little about its history, traditions, faculty and recent achievements. The Richard Ivey School of Business is a professional School within The University of Western Ontario (UWO). One of Canada's oldest universities, UWO is now an academic community of 17 faculties and professional schools. It is home to more than 26,000 students and over 4,000 faculty and staff. Located in the southern-most part of Canada, London, Ontario is a city of 330,000, halfway between Toronto and Detroit. Although Ivey is based in London, Ontario, it also has campuses in Mississauga (Toronto) and most recently, in Hong Kong.

Historically the School has been a leader in management development. A partial list of achievements follows. They illustrate the proactive nature of change at Ivey.

- ♦ In 1922, the first undergraduate business department in Canada was established.
- ❖ In 1932, the school began to publish its own journal. Known as *Ivey Business Quarterly*, it reaches out to both academic and management audiences and enjoys a circulation of 10,000 in 25 countries.
- ♦ In 1948, Canada's first executive development program was established. (From the beginning, faculty members were required, as part of their responsibilities, to produce case material for the new programs being designed.)
- ♦ In 1948, the first MBA program in Canada was established.
- ♦ In 1961, Canada's first Ph.D. program in business was introduced.
- ❖ In 1974, official designation was received by the Federal Government as Canada's first, of what are now eight, Centre(s) for International Business Studies (CIBS). (The CIBS were the forerunner to the CIBERs in the United States). Financial support for this Centre continues to be provided by the Federal Department of Foreign Affairs.
- ❖ In 1975, Ivey opened its own case and publications office. This office now holds an inventory of 2,000 Canadian cases and is the Canadian clearing house for Harvard cases. In 1998, Ivey cases were being distributed to over 100 teaching institutions and 100 corporations in over 20 countries. Ivey is the second largest producer of management case studies in the world, with over 1,000,000 copies studied each year by people outside the university.
- ♦ In 1978, commencement of its first international student exchange program took place.
  Over twenty such exchange programs are now in place.

- ♦ In 1984, the School took a leading role in establishing the National Centre for Management Research and Development in London with support from the Canadian Federal Government
- ♦ In 1992, Ivey was selected to be the editorial home for the 1993-97 period for the *Journal* of *International Business Studies*, the leading International Business journal.
- ❖ In 1993, Canadian Business magazine's survey rated Ivey as the top MBA School in Canada, according to all groups: CEOs, human resources executives, and placement consultants. This ranking has been re-confirmed every year. In 1994, Asia, Inc. rated Ivey among the World's Top 25 Business Schools for Asians.
- ❖ In 1997, the Journal of International Management named Ivey the world's leading contributor to the international strategic management literature, ahead of Harvard & Kellogg. Business Week magazine ranked Ivey as one of the top international business schools in the world, alongside INSEAD and LBS; and US News and World Report selected Ivey as one of the top 15 business school in the world for executive development programs.

As of 1998, the School had 65 full-time faculty who annually taught 600 regular and executive MBA, 300 undergraduate, and 40 Ph.D. students, plus executives in a wide range of non-degree programs. Its broad objective is to be widely recognized as one of the top 10 business schools in the world on the basis of its outstanding teaching programs, with a creditable research record in selected areas.

Internationally, the School has been involved with major offshore projects for 30 years, and is currently involved in Asia (especially China) plus several republics in the former Soviet Union. These projects have typically involved the establishment of local management training capability.

#### China Activities

1984 marked the beginning of a continuing linkage with Tsinghua University in Beijing. The School made a commitment to prepare Chinese MBA and Ph.D. students for studies at Ivey, work with visiting scholars, provide some short-term instruction in China, and to assist Tsinghua University's School of Economics and Management in the development of its management faculty. Another goal of the project was to help Ivey become more familiar with China and the conduct of business in that country.

During Phase I of the project: 35 articles, cases, and notes were written, nine Ivey faculty participated in short lecture visits to China, 12 visiting scholars spent one year each at Ivey; there were eight graduates of the MBA program; all visiting Chinese attended the Case Writing Workshop. This project was funded by the Canada-China Management Education Program. An expanded Phase II of this program took place until 1994. A five-year endeavour, the project was a joint venture with the University of Waterloo, and in China, with Tsinghua, Dalian University of Technology, and Southeast University. Ivey's commitment was to continue to assist

in the development of Chinese institutional capacity for management education. A major element was the design, development and delivery in August 1992 of a program on teaching Joint Ventures, Technology Transfer, and International Trade via The Case Method. This train-the-trainers program was offered to academics from across China, through interpreters. All of the teaching material was translated into Chinese.

A large scale joint publishing effort was undertaken. In April 1992, the first volume of five international business casebooks was published in Chinese by Tsinghua University Press. This series was a joint undertaking of Ivey and Tsinghua. This series constituted a comprehensive collection of international business cases for Chinese managers and students. In 1992-93, six international texts were published in Chinese by presses arranged through our partner schools at Dalian and Southeast.

Since then a great deal of Ivey-initiated China-related case writing has occurred: various books have been either reprinted, translated or specifically written for the China market; we have offered introductory-business courses at Tsinghua; faculty visits have occurred, and so forth. All of this has occurred in the spirit of demonstrating Ivey's genuine commitment to China.

Lawrence G. Tapp

Dean

Richard Ivey School of Business

## 总编按语

中国国家教育部在审定中国工商管理硕士课程内容时提议,每门课程的25%要采用案例 教学方法。这一要求在某种程度上是为保证中国未来(和现有)的经理们既能够面对崭新与 众不同的各种学习环境,又能够获取制定决策所必需的、与基础理论并重的实际经验。

本系列案例丛书的宗旨正是为中国提供最高品质的教学用部分案例,以期满足当前的迫切需求。在此提供的案例都是全面的、实际的、要求进行管理决策的现场情景案例。其中不包括对案例历史的赘述(这无助于学员们制定决策)、小型案例及"花边案例"(这些不适于用作80~90分钟的课时内容)、或图书馆资料(从图书馆的二手资料所作的总结远不如直接与经理们交谈所总结的案例更能增长见识)。

此次首批出版的系列案例丛书是为直接配合中国工商管理硕士课程的各门必修课程而编写的,我们随后将为更多的常规选修课程出版案例选集。

这些案例选集的主要资料均来源于加拿大西安大略大学的毅伟管理学院。毅伟管理学院 是全世界第二大的教学案例制作者,并且是当今亚洲案例的最大制作者。毅伟管理学院为使 这些书籍得以问世,放弃了正常出版所需的全部许可费用,这是其它一些学院不情愿做的。 毅伟管理学院决心对中国履行其真诚的承诺。

本系列从书得以出版全靠下列各方鼎力相助:

- 万国出版公司总裁孙立哲先生的动议。
- 清华大学经济管理学院院长赵纯钧先生与副院长陈小悦先生的鼓励与协助。
- 企业资助(在某些情况下,毅伟管理学院能得到企业的资助,以获得完成此系列丛书所需的重金投入。我们将在每本书的适当位置对该书的资助者表示感谢)。
  - 毅伟管理学院中为各卷选择案例并撰写了导言的教授同仁们。
  - 我们的编辑协调人玛丽·罗伯特女士。

包铭心

安大略省伦敦市

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一九九八年六月

#### Note from the Series Editor

The State Education Commission committee which looked at the content of MBA programs in China has suggested that 25% of each course utilize the case method. Such a requirement is intended in part to ensure that future (and existing) managers in China are (A) exposed to a wide range of new and varied learning situations; and (B) gain practical experience in decision-making, so as to balance the underlying theory.

This case series is intended to partially fill China's immediate need for highest quality teaching cases. Here a case study refers to a comprehensive, field-based, decision-requiring picture of an administrative situation. It does not include descriptive case histories (which require students to make no decision); mini-cases or vignettes (which are anecdotal, and not suitable as a stand-alone basis for an 80-90 minute class); or library-based (such secondary sources produce far fewer insights than actually interviewing managers for the cases).

This initial series of casebooks was compiled to directly correspond to each of the required courses in China's MBA programs. Subsequent case collections will be compiled for popular elective courses.

The primary source of cases for these case collections is the Ivey Business School, University of Western Ontario, Canada. Ivey is the second largest producer of teaching cases in the world, and the largest producer of current, Asian cases. Ivey waived all of its normal permission fees in order to see these books produced. Certain other institutions were unwilling to do so. Ivey is committed to China.

The production of this Series would not have been possible without:

- ♦ the initiative of Lee Sun, President of Multi-Lingua;
- ♦ the encouragement and assistance of Tsinghua Dean Zhao Chunjun and Assistant Dean Chen Xiaoyue:
- → my faculty colleagues at Ivey who selected the cases and wrote the introductions to the individual volumes:
- ♦ our editorial coordinator, Mrs. Mary Roberts.

Paul W. Beamish London, Ontario

Paul W Beamish

June 1998

## 廖信博(E.F. Peter Newson)

廖信博现任毅伟管理学院管理科学和信息系统副教授,曾任毅伟管理学院工商管理硕士 计划主任。他已在该院辛勤工作了25年,此前曾在麻省理工学院任教。他拥有圣琼皇家军事 学院和加拿大皇家军事学院的工学(工程)学士学位、艾伯塔大学的理学(机械工程)学士 学位、西安大略大学的工商管理硕士学位、麻省理工学院斯隆商学院的博士学位。

廖信博教授曾任国际信息管理学院(IAIM)院长,现任加拿大信息处理协会(CIPS)常务理事。独立或参与合著过多部著作,在学术杂志上发表过多篇学术论文,并撰写过许多商学案例。他曾两度出任《加拿大信息处理杂志》(加拿大信息处理协会的正式刊物)的特约编辑,并担任国际信息管理学院《管理信息系统教育杂志》的编辑。

作为北美、欧洲、中东和亚洲行政主管课程的教授和顾问,他一直担任着CIPS国际研讨会的理事、并任加拿大计算机保健系统应用组织(COACH)的理事。

他目前的研究方向是信息技术引发的产业变革,尤其是保健信息系统、社区保健信息网络和跨公司系统。

他曾任一些组织,如伦敦心理医院董事会、联合之路运动、家庭学校联合会和布**鲁斯海**滩协会等的总裁/董事长。





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Peter Newson is an Associate Professor of Management Science and Information Systems and past director of Ivey Business School's MBA Program. Prior to joining the school more than 25 years ago, Newson taught at the Massachusetts Institute of Technology. He received a BSc (Engineering) from the College Militaire Royal de St. Jean and Royal Military College of Canada, a BSc (Mech. Engineering) from the University of Alberta, an MBA from The University of Western Ontario, and a PhD from the Sloan School of Management, MIT.

Newson is Past President of the International Academy for Information Management (IAIM) and is currently a National Director-at-Large for the Canadian Information Processing Society (CIPS). He has authored/co-authored several books, papers for academic journals, articles for business publications, and business cases. He has twice been the guest editor of Canadian Information Processing, the official publication of the CIPS. He is co-editor of the IAIM Journal of Education for MIS.

Executive teacher and consultant in North America, Europe, the Middle East and Asia, Newson has been the director/co-director of national seminars for CIPS and the Canadian Organization for the Application of Computers in Health (COACH).

Current research interests include the transformation of industries enabled by information technologies — in particular, health information systems, community health information networks and interorganizational systems.

Community activities include president/chair of several organizations such as the London Psychiatric Hospital Board of Directors, the United Way Campaign, the Home and School Association, and Bruce Beach Association.

## 彭雷迈(Michael Parent)

彭雷迈是毅伟管理学院管理信息系助教。加入毅伟之前,他在皇后(Queen's)大学和加拿大皇家军事学院执教。他拥有Carleton大学的荣誉榜学士学位、皇后(Queen's)大学的工商管理硕士和博士学位。从事学术研究以前,他曾为产业界效力12年以上,在加拿大和国外的多家私营和国营企业与机构从事市场营销与产品开发工作。

彭雷迈博士的研究方向包括: 团体支持系统、群件、知识库管理、市场营销战略、组织间联合与电讯等。除了在毅伟管理学院的教学与研究活动外,他正在为加拿大邮政企业及其机构重整的潜力问题进行管理信息系统研究。他的论文发表在包括《哈佛商报》在内的多种权威性杂志上,以及加拿大管理科学协会、公共政策与市场营销协会和国际信息系统大会等组织的会刊上,他的另外一些论文正在由《信息系统管理学杂志》、《成人教育季刊》和《广告研究杂志》进行评审。彭雷迈博士是一位积极的案例写作者,他已为毅伟出版社完成了超过15个管理信息系统与市场营销方面的教学案例。

彭雷迈博士积极参与毅伟管理学院的行政管理人员教育培训,他是"供非信息技术产业 行政管理人员学习的信息技术课程"计划的总监,并且在其他计划中教授管理信息系统课程。

#### **Michael Parent**

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Parent's research interests include group support systems, groupware, knowledge management, marketing strategy, interorganizational alliances and telecommunications. Along with his work at Ivey Business School, he is currently researching MIS literature for Canada Post Corporation and its potential for reshaping the organization. His articles have been published in leading journals, reviewed in the Harvard Business Review, and also published in the proceedings of the Administrative Sciences Association of Canada, the Public Policy and Marketing Association, and the International Conference on Information Systems. He has articles under review with the Journal of Information Systems Management, Adult Education Quarterly and the Journal of Advertising Research. An active case writer, Parent has completed over 15 teaching cases in Management Information Systems and Marketing for Ivey Publishing.

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## 编者的话

对管理信息系统(MIS)的研究可以大致分为两个主要领域:基础研究和专题研究。基础研究面临的问题是如何在组织内部对信息资源进行管理,其目标是向经理人员提出建议、规则与解决框架,以便他们能够成功解决这些问题;另一方面,专题研究领域关注技术的飞速发展,致力于使经理人员掌握特定的新信息技术及由此可能为公司带来的潜在利益与缺陷。对管理信息系统(MIS)进行全面研究均应包括上述两个方面。

本案例集试图收录涉及这两个领域的各种案例,一些案例涉及其中一个领域,而大部分案例则同时触及两个领域。由此,可将它们分为既有区别又相互联系的3个部分:

第一部分: 以信息为基础的企业变革;

第二部分: 企业变革的技术问题:

第三部分: 国家信息技术基础结构。

第一部分的案例回答了"为什么采用信息技术?"及如何利用信息技术保障企业的战略决策等问题。"第一忠信银行公司"案例讲述公司从外部资源获取信息技术的决策,以争取时间并提高业绩;在"西部鲜花拍卖:波斯菊项目"案例中,当企业面对激烈的海外市场竞争环境时,需要抉择采取渐进式的还是激进式的改革方案。在所有案例中,如何管理信息技术资源以及该技术本身都是研究对象。

第二部分的案例回答了"什么是信息技术?"。"SAP: 为顾客特制的高级企业软件"和"梅塔克SAP项目"案例介绍了企业系统(Enterprise Systems)——项成长中的全球技术;"特塞特 A/S通过卫星发送遥感和低速数据通讯设备"案例展示了一家小型企业在向南美市场推出"小型孔型接头(VSAT)"卫星网络产品时面临的挑战;最后,"为梅的斯保健中心设立网站"和"西斯科系统公司:运用互联网促进公司发展"案例分别涉及Internet和Intranet技术。这部分的重点是理解如何运用企业内外存在的新技术。

最后一部分案例将前面两部分涉及到的管理与技术问题结合起来,并提升到国家和全球的地位来考虑。"有线惠灵顿:信息城市项目和城市联网"案例讲述新西兰如何建立全城市范围通信基础设施;"香港贸易联网:电子数据交换的构想"案例关注在信息技术支持下,在全港发展交通运输设施的优势;"中国教育科技网:中国网络管理的发展"案例研究Internet在中国的发展;"数据电脑公司"案例将"特塞特 A/S"案例中学到的VSAT应用于蒙古。

信息技术的飞速进步使得从技术和管理两个角度考虑企业发展问题变得十分重要。除了上面3部分提到的问题外,还有另一个"如何做?"的问题,诸如如何使用信息技术,管理人员如何对信息系统进行决策,如何评定对信息技术的投资规模以及如何为企业在未来的发展中找到最佳定位等。我们希望本案例集能为面临信息系统技术挑战的管理人员们发挥作用。

#### A Note from the Editor

The study of Management Information Systems (MIS) can be broadly divided into two major areas: Foundations and Topics. The Foundations subject area considers the challenges associated with management of information resources in an organization, and aims to impart advice, rules, and frameworks that may aid managers in all functional areas deal successfully with these challenges. The Topics subject area, on the other hand, considers the rapid rate at which technology evolves, and seeks to inform managers on the potential gains and pitfalls that specific new information technologies may pose.

No study of MIS would be complete without considering both.

In this book, we have tried to assemble cases that consider both subjects, independently in some cases, but jointly in most. In order to do so, the cases may be grouped into three distinct, interrelated parts:

Part I: Information-Based Corporate Transformation

Part II: Corporate Transformation - The Technologies

Part III: National IT Infrastructures

The first part builds the case for "Why Information Technology?", or how organizations may use information technology to enact their strategies. First Fidelity Bancorporation deals with the decision to outsource IT implementation in order to gain both time and performance efficiencies. Finally, Flower Auction Westland addresses the decision whether to implement change in an evolutionary, or revolutionary, manner when faced with fierce offshore competition. In all cases, both the question of how to manage IT resources, as well as the technologies themselves are considered.

The second group of cases addresses the question of "What Information Technology?". SAP and MetalCo introduce Enterprise Systems – a growing global technology. TSAT A/S presents the challenges faced by a small organization attempting to market a Very Small Aperture Terminal (VSAT) satellite product in South America. Finally, Medisys and Cisco deal with the Internet and Intranets, respectively. The emphasis is on understanding the deployment of new technologies within, and beyond the organization.

The last module combines the managerial and technical aspects from the first two sections, and elevates the issues to national and global levels. Wired Wellington addresses the establishment of a city-wide communications infrastructure in New Zealand. Hong Kong TradeLink focuses on the evolution of transportation and distribution infrastructures, and the required information technology support, to develop a sustainable country-based advantage. CERNET considers the evolution of the Internet in China, while Datacom applies the VSAT lessons learnt in the TSAT A/S case to Mongolia.

The pace at which information technology changes makes it imperative to consider both the technical and managerial dimensions. Transcending the three modules is also the

question of "How?" - how information technology gets used, how managers decide, how IT investments are evaluated, and how we can best position our organizations to take advantage of future developments. We hope this text is useful to you, as managers, as you confront the challenges we all face with respect to information systems.

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