UNUCC 12/17/01 Senate 1/29/01

Undergraduate Distance Education Review Form

(Required for all courses taught by distance education for more than one-third of teaching contact he

Existing and Special Topics Course

Course	: IFMG 300 Information Systems: Theory and Pract	ice (Section 80	01)
Instruc	ctor of Record: Dr. Louise Burky phone: 357-7785	e-mail: 1bb	ırky@iup.edu
Step O	ne: Attach signed Budget Approval Form to this form.		
The cor	wo: Department or its Curriculum Committee mmittee has reviewed the proposal to offer the above course us ds to the CBA criteria as follows:	sing distance educa	tion technology, and
1.	Will a qualified instructor teach the course?	X Yes	_ No
2.	Will the technology serve as a suitable substitute for the traditional classroom?	_X Yes	_ No
3.	Are there suitable opportunities for interaction between the instructor and student?	X Yes	_ No
4.	a. Will there be suitable methods used to evaluate student achievement?	Yes	_ No
	b. Have reasonable efforts been made to insure the integrity of evaluation methods (academic honesty)	Yes	_ No
5.	Recommendation: X Positive (The objectives of the course can be Negative signature of department	met via distance	education.) // 30 / 0 / date
Studie requir comm	tive recommendation, immediately forward copies of this form and as Office for consideration by the University-Wide Undergraduate Copies by Graduate Committee for graduate-level offering. Send ittee, 2) dean of the college, and 3) Dean of the School of Continuing Three: UNIVERSITY-WIDE UNDERGRADUATE CONTINUITY	information copies to Education.	1) the college curriculum
<u>X</u>	Positive recommendation Negative recommendation	echist	12/17/0/ date
Forwa	ard this form to the Provost within 24 calendar days after receipt by	committee.	
Step	Føur: Provost Approved as distance education course Rejected as distance education course signature of Provos	Stry	1417/01 date
		en e	The same of the sa

Step Five:

Forward materials to Dean of the School of Continuing Education.

DISTANCE EDUCATION JUSTIFICATION IFMG 300 – 801 Dr. Louise B. Burky

1. Will a qualified instructor teach the course?

Yes. Dr. Burky has 20 cumulative years of teaching, and seven years teaching this content. She has attended several WEB/CT training sessions on campus and as many at major conferences. In the future, additional instructors teaching this course may be included, since the course has multiple sections.

2. Will the technology serve as a suitable substitute for the traditional classroom?

Yes. The text material used in the regular classroom has been provided under a special ISBN number by Prentice Hall. Students will use this material as well as that from the publishers regular website to complete assignments. In addition, the instructor will provided extensive course content modules and exercises via WEB/CT.

3. Are there suitable opportunities for interaction between the instructor and students?

Yes. Threaded discussions in class groups, class and instructor response to presentation of materials, e-mail within WEB/CT, and twice weekly "batched" answers to questions. In addition there will be a weekly "consultation" hour in my office for anyone desiring to use it.

4 (A). Will there be suitable methods used to evaluate student achievements?

Yes. These will be online quizzes, presentations, and group discussion exercises. Two tests and the final will be given in the classroom in the conventional manner.

4 (B). Have reasonable efforts been made to insure the integrity of evaluation methods (Academic honesty)?

Yes. WEB/CT is a secure password-protected environment. The combination of timed online quizzes, online work and comment, and conventional tests will yield convergent validity in this respect.

01-370

Budget Approval Form

(Each semester a distance education course is offered, prior budget approval of the sponsoring dean is required.)

Distance Education Course

Course	and Section: _	IFMG 300 806		for Semester:	Spring	Year:	2002
Instruc	tor of Record:	Dr. Louise Burk	y phone:	357-7785	_ e-mail:	lbburky@i	.up.edu
]	Check all that a Base compensa	uling as a distance apply: tion: on-load payments:	over	load			(a)
,	Other required			udent fee(s)	tra		sement
(Other costs:	video t	ransmission		marketing	3	
			OR				
	Check all that a	ccheduling as a d apply: tion: on-load					
		equired payments:	cours		pensation (three years	after
			remot	e site fee(s)	remot	e site studeı	nt fee(s)
			travel	reimbursemer	nt and Artic	cle 40 stiper	ıd
]	Budget Appr	oval e available in my colle	ege to subsidize	the above costs	for this cou	rse.	
-	Enrollme	nt of is required	to cover the co	osts of this cours	e.		
-	Other	740°					
Dean:	L Comsignature (budget	approval) date	Faculty mem	ber: Loui	ine B. E	Beuky	10/21/01

For the initial scheduling, attach this signed form to the Review/Approval Form. For subsequent scheduling, send signed form to the Dean of the School of Continuing Education, who will advise the Registrar to add the course to the schedule.

INDIANA UNIVERSITY OF PENNSYLVANIA EBERLY COLLEGE OF BUSINESS & INFORMATION TECHNOLOGY

IFMG 300/801- Spring 2002 Information Systems: Theory and Practice

Dr. Louise B. Burky
203-A Eberly
Office Hours: Monday
12:00 – 1:00
Tuesday
11:00 – 1:00

Office: 357-7785 Wednesday By appt. or stop by

E-Mail: Through WEB/CT only

Thursday

11:00 - 1:00

REQUIRED TEXT:

This is a special edition of the text below for use with WEB/CT. ISBN # 013-074-1078. It is available in the campus bookstore.

Laudon, Kenneth C. and Laudon, Jane P. <u>Management Information Systems: Organizations and Website</u>: www.prenhall.com/MyPhlip

Optional: Plasticized study guides on Win98, 2000 and/or Internet, if you need them.

PREREQUISITES: Beginning with the SUMMER 2000 term, there will be absolute enforcement of every prerequisite for the coursework in the Eberly College of Business and Information Technology. This means that students cannot postpone prerequisites and take them after the course in question. The Dean's office is responsible for monitoring course prerequisites. Students who manage to register for coursework in spite of the fact that they do not have the appropriate prerequisite will be subject to unilateral withdrawal after the course has commenced. At that time, no appeal will be accepted and adding a different class after the official registration period will not be approved.

CATALOG DESCRIPTION: Includes basic MIS concepts, fundamentals, and practices. Broad areas of coverage are the computer as a problem-solving tool, Computer-Based Information Systems (CBIS), organizational information systems, and Information Systems Management. (Replaced IM 241 in Eberly College of Business core, effective Fall, 1992).

COURSE OBJECTIVES: The primary objective of this course is to integrate MIS "Theory" with standard managerial practice, while simultaneously introducing the student to contemporary IS practice and literature. This integration results in a three pronged approach that includes foundations, technology and managerial considerations. Specifically, at the end of this course the student will be able to:

Describe the importance of data and information as business assets in the modern competitive environment, describing its implementation through the concept of Information Resource Management, especially in the global environment

Describe and discuss how information systems support managers in the organizational decision processes, including ethical and legal issues.

Identify the hardware, software and telecommunication components of various types of systems that facilitate data organization and transfer.

Identify issues related to the use of artificial intelligence and group systems in the business environment.

COURSE METHODOLOGY: This distance ed. course will be conducted entirely within the WEB/CT environment, except for the three major tests. A combination of threaded discussions, collaborative learning through group presentations, and weekly timed online quizzes will provide multiple means for content reinforcement. A work schedule in calendar format will be posted online.

PRESENTATIONS: Beginning in the third week of class individual/groups will begin presentation of key points in the Chapter for that week. These will be due in uploaded format by Tuesday noon, the class will comment to the presenting group by Thursday noon, and the instructor will comment by Saturday noon. Each presentation must be at least three pages in length, and incorporate material from at least one website per person provided in the text materials.

CLASS COMMUNICATION: All class communication will occur within the WEB/CT environment. Presentation groups will communicate with each other, and then with the instructor through the "presentation folder". Individual students may communicate with the instructor through the WEB/CT e-mail facility ONLY. No other e-mail is acceptable. Content questions will be "batched" and answered twice weekly to the entire class. Administrative type questions can be answered either individually or to the class as appropriate.

MyPhlip.com: All study materials are found on the general website and the I: drive in Eberly. The Laudon website contains sample test questions of the type used in quizzes and tests.

"ATTENDANCE": Students will be expected to have completed the WEB/CT student learner's guide at www.WEB/CT.com. There will be a required afternoon or evening session at the beginning of the term. This enables distribution and explanation of one long handout, and demonstration of the WEC/CT facility for those students unfamiliar. Thereafter, two major tests and the final will require personal attendance to assure academic honesty. A variety of times can be arranged. These will be determined during the first meeting.

"Attendance" at your group online sessions is mandatory. If a group member does not participate in the group adequately the group, by vote, may reduce the persons grade by 10% for that assignment. Similarly, the entire class can do likewise. Theoretically, at least, a student who systematically avoids all online participation, could damage themselves a great deal.

COURSE EVALUATION: Your final grade will be determined by the percentage of the total points you accumulate during the term. Everything counts even if only a small amount. The usual letter grades will then be applied at the end of the course. There <u>may</u> be a sliding grade scale at the end of the term in the student's favor. It will be determined at that time. Grades during the term will be online through WEB/CT.

WEIGHTING:		POINTS	
Tests	50%	150, 150, 200	
Classwork &	30%	300	
Presentations			
Quizzes	20 %	200	

Letter Grade Conversion: A = 90% B = 80% C = 70% D = 60% F = < 60%

PLANNED WORK SCHEDULE

NOTE: All demonstration cases and Windows on Technology should be read along with the accompanying chapter of the text. Additional content modules will be on line, and will be included in tests.

DATE	TOPICS	READINGS
Week 1	Syllabus and WEB/CT tutorial Managing the Digital Firm - Why Technology/Information Systems? - Contemporary Approaches - New role of IS in Organizations - Learning to use IS	Ch. 1
Week 2	Systems in the Enterprise - Key Applications - Functional Perspective - Integrating Functions and Processes	Ch. 2
Week 3	 IS, Organizations, Management, Strategy Organizations and IS Changing role of IS in organizations Managers, Decision Making and IS IS and Strategy 	Ch. 3
Week 4	Electronic Commerce and Electronic Business - Electronic Commerce - Electronic Business - Electronic Business and the Digital Firm - Management Challenges and Opportunities	Ch. 4
Week 5	Managing Hardware Assets - Hardware and Technology Infrastructure - I/O, Storage Technology - Categories of Computers, Systems - Managing Hardware Asset FEST I, CHAPTERS 1 - 5	Ch. 5
Week 6	Managing Software Assets - What is it? - System Software - Application Software - Contemporary Development tools - Managing Software Assets	Ch. 6
Week 7	Managing Data Resources - Data Organization - The Database Approach - Database Environment - Database Trends	Ch. 7

Week 8	Telecommunications and Networks - Components and Functions - Networks - Electronic Commerce Technologies	Ch. 8
Week 9	Technology Infrastructure: Internet/Web -The IT infrastructure and the Digital Firm -Internet Infrastructure - WWW - Support Technologies - Challenges Management ST II Chapters 6 - 9	Ch. 9
Week 10	Organization Redesign with IS - Planned Change - Business Process Reengineering/TQM - Analysis and Design Development - Alternative Methodologies	Ch. 10
Week 11	Test Review -Bs. Value of Systems and Change - Implementation/ Risk and Design - Cognitive foundations for Artificial Intelligence	Ch . 11 sec. 11.2 and 11.3
Week 12	Knowledge workers and Artificial Intelligence - Knowledge Management - Knowledge work Systems - Artificial intelligence - Other intelligent techniques	Ch.12
Week 13	Ethical an Social Impact of Information Systems - Understanding the Issues - Ethics in the Information Society - Moral Dimensions of information Systems	Ch.15
Week 14	Security and Control in the Global Environment - Vulnerability and Abuse	Ch. 14

Reading List

- Blodgett, Mindy. (1998, February 15). Hi, Technology! <u>CIO Magazine</u>, http://www.cio.com/archive/021598_cope_content.html
- Davenport, Tom. (1994, September 5). Coming Soon: The CKO. CMP Media, Inc., TechWeb. http://www.techweb.cmp.com/iw/509/cko.htm
- Davis, Beth. (no date). Security Survey: Is it safe? Information Week Online. CMP Net, The Technology Network. http://techweb.cmp.com/iw/y47/47iuss.htm
- Feinstein, Debra. (no date). Computing for the People. Fast Company Online Archives.
- Field, Thomas G. Jr. (1997, April 25). Copyright for Computer Authors. Franklin Pierce Law Center. http://www.fplc.edu/tfield/cOpySof.htm
- Harvard Business Review. (1998, January-February). The Competitive Dynamics of Network-based Businesses, p. 108-109.
- Hunton, James E. (1996, Fall). Involving Information System Users in Defining System Requirements: The influence of procedural justice perceptions on user attitudes and performance. <u>Decision Sciences</u>, Vol. 27, No. 4, p. 647-652.
- Ives, Blake, Senior Editor. (1992, December). Transformed Information Systems Management. MIS

 Quarterly, Vol. 16, No. 4, Editors Comment.

 http://www.misq.org/archivist/vol/no16/issue4/edstat.html
- Littman, Jonathan. (1997, September 18). Hacker shocker: Project reveals breaches galore. The Zonet News Channel. http://www.zdnet.com/zdnn/content/zdnn/0918/zdnn0010.html
- Malhotra, Yogesh. (no date). Role of Information Technology in Managing Organizational Change and Organizational Interdependence. http://www.brint.com/papers/change/overview.htm
- Malhotra, Yogesh. (1998) Abstract: Toward a Knowledge Ecology for Organizational White-Waters (Keynote Presentation for the Knowledge Ecology Fair 98). http://www.brint.com/newswire.htm#stories
- Malhotra, Yogesh. (1997). Knowledge Management in Inquiring Organizations. http://hsb.baylor.edu/ramsower/ais.ac.97/papers/malhotr3.htm
- Malhotra, Yogesh. (1997). Knowledge Management for the New World of Business. http://www.brint.com/km/whatis.htm
- Malhotra, Yogesh. (1998, January 30). Knowledge Management, Knowledge Organizations & Knowledge Workers: A View from the Front Lines. http://www.brint.com/interview/maeil.htm
- Manville, Brook and Foote, Nathaniel. (1996, July). Harvest your workers' knowledge. <u>Datamation</u>. http://www.datamation.com/PlugIn/issues/1996/july/07know1.html

- McKie, Stewart. (1996, October). Data Warehouse 101. http://www.controllermag.com/issues/Oct96/Dataware.html
- McMaster, Michael D. (1997). Organising for Innovation: Technology and Intelligent Capacities. http://www.brint.com/km/mcmaster/confer.htm
- Okerson, Ann. (1996, July). Who Owns Digital Works? <u>Scientific American</u>. http://www.sciam.com/0796issue/0796okerson.html
- Pisano, Gary P. (1994). Knowledge, Integration, and the Locus of Learning: An Empirical Analysis of Process Development. Harvard Business School Working Paper. http://www.hbs.edu/units/tom/working papers/knowledge.html
- Pool, Robert. (1997, July). When Failure is not an Option. Excerpt from <u>Beyond Engineering: A New Way of Thinking About Technology</u>, Oxford University Press. http://web.mit.edu/afs/athena/org/...view/www/articles/july97/pool.html
- Sauter, Vicki & ______. (no date). Why General Managers Need to Understand Information Systems. http://www.umsl.edu/~lacity/whymis.html
- Sifonis, John G. and Goldberg, Beverly. (1997, March 24). Strategic Management -- Changing Role of the CIO -- As technology becomes central to business, the CIO becomes a key mover in the ranks of upper management. CMP Media, Inc., TechWeb, Issue: 623; Section: Trends. http://www.techweb.com/se/directlink.cgi?IWK19970324s0043
- Slater, Derek. (1997, November 15). Learning Curve: Technology Made Simple -- Wary of Groupware? CIO Magazine. http://www.cio.com/archive/enterprise/111597_learning_content.html
- Smith, Christopher H. (1997, May 22). Netizens Protection Act of 1997, H.R. 1748. http://ww.imls.edu/cyber/statutes/email/npal.html
- Stein, Tom. (1997, December 22). Federal Site Drops SAP. Information Week, p. 36.
- Sullivan, Michael. (1998, January). Reshaping the Drug Discovery Environment. <u>Today's Chemist</u> at Work, p. 11-15.
- Wagner, Suzanne C., Chaudhury, A., Rao, H. Raghav, and Sanders, G. Lawrence. (no date). A Workflow Approach to Information Systems Development. http://hsb.baylor.edu/ramsower/acis/papers/wagner.htm

Empowering the User (no author, date, periodical, etc.)

SAMPLE ACTIVITIES FOR DISTANCE ED. IFMG 300 – 801

CHAPTER 1

- 1. Read the chapter and case at the end. Answer the case questions incorporating chapter content in your answers.
- 2. Find related material to the additional content module on one of the websites given and e-mail three major points, in comprehensible form to all your classmates.
- 3. Begin building a "knowledge base" of of web materials related to course concepts.

chapter

MANAGING THE DIGITAL FIRM

LEARNING OBJECTIVES

- ANALYZE ROLE OF INFORMATION SYSTEMS IN BUSINESS ENVIRONMENT
- DEFINE INFORMATION SYSTEM, COMPUTER LITERACY, INFORMATION SYSTEMS LITERACY
- EXPLAIN HOW INFORMATION SYSTEMS TRANSFORM ORGANIZATION & MANAGEMENT

L

LEARNING OBJECTIVES

 ASSESS DIGITAL FIRM, ELECTRONIC COMMERCE, ELECTRONIC BUSINESS, INTERNET TECHNOLOGY

• IDENTIFY MANAGEMENT
CHALLENGES TO
BUILDING, USING
INFORMATION SYSTEM

MANAGEMENT CHALLENGES

- WHY INFORMATION SYSTEMS?
- CONTEMPORARY APPROACHES TO INFORMATION SYSTEMS
- ROLE OF INFORMATION SYSTEMS
- USING INFORMATION SYSTEMS

MANAGEMENT CHALLENGES

- 1. DESIGN COMPETITIVE & EFFICIENT SYSTEMS
- 2. UNDERSTAND SYSTEM REQUIREMENTS OF GLOBAL BUSINESS ENVIRONMENT
- 3. CREATE INFORMATION
 ARCHITECTURE THAT SUPPORTS
 ORGANIZATION'S GOALS

MANAGEMENT CHALLENGES

- 4. DETERMINE BUSINESS VALUE OF INFORMATION SYSTEMS
- 5. DESIGN SYSTEMS PEOPLE CAN CONTROL, UNDERSTAND & USE IN A SOCIALLY, ETHICALLY RESPONSIBLE MANNER

THE CHANGING BUSINESS ENVIRONMENT

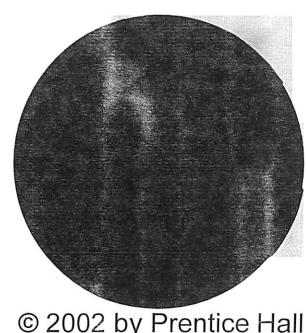
GLOBALIZATION

INDUSTRIAL ECONOMIES

• TRANSFORMATION OF THE ENTERPRISE

GLOBALIZATION

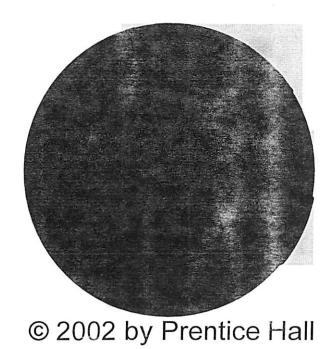
- MANAGEMENT & CONTROL
- COMPETITION IN WORLD MARKETS
- GLOBAL WORK GROUPS
- GLOBAL DELIVERY **SYSTEMS**



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INDUSTRIAL ECONOMIES

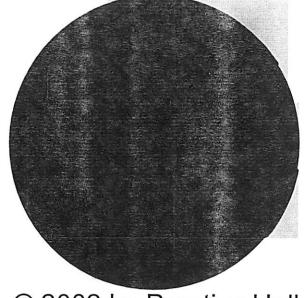
- KNOWLEDGE-BASED ECONOMIES
- PRODUCTIVITY
- NEW PRODUCTS & SERVICES
- KNOWLEDGE AS AN ASSET
- TIME-BASED COMPETITION
- SHORTER PRODUCT LIFE
- TURBULENT ENVIRONMENT
- LIMITED EMPLOYEE
 KNOWLEDGE BASE



*

TRANSFORMATION OF ENTERPRISE

- FLATTENING
- DECENTRALIZATION
- FLEXIBILITY
- LOCATION INDEPENDENCE
- LOW TRANSACTION COSTS
- EMPOWERMENT
- COLLABORATIVE WORK



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EMERGENCE OF THE DIGITAL FIRM

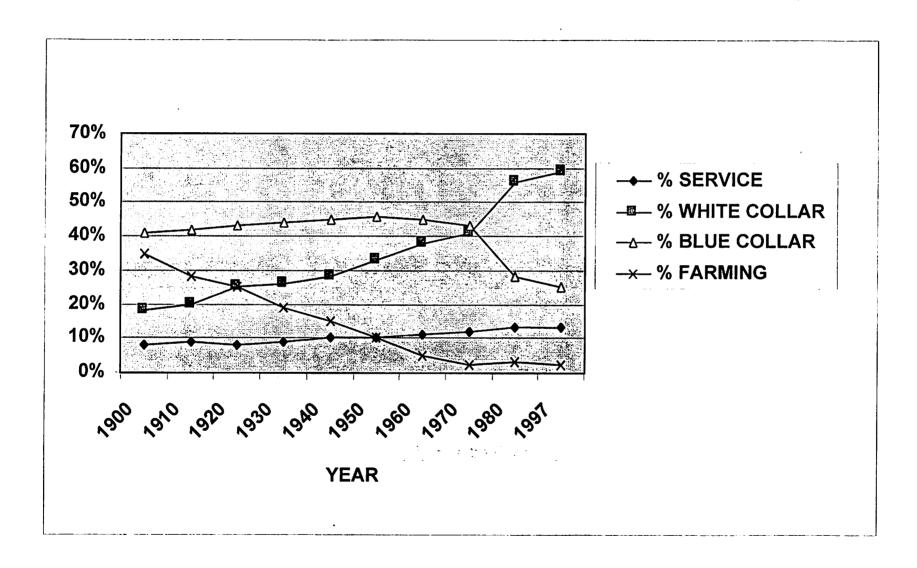
 DIGITALLY-ENABLED RELATIONSHIPS WITH CUSTOMERS, SUPPLIERS, EMPLOYEES

 CORE BUSINESS PROCESSES VIA DIGITAL NETWORKS

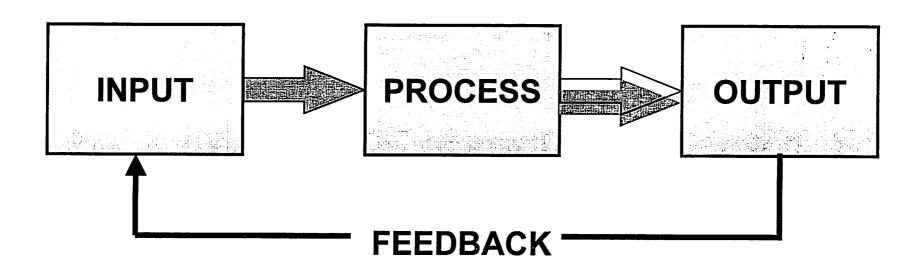
 DIGITAL MANAGEMENT OF KEY ASSETS

 RAPID SENSING & RESPONDING TO CHANGE

LABOR FORCE COMPOSITION 1900-1997



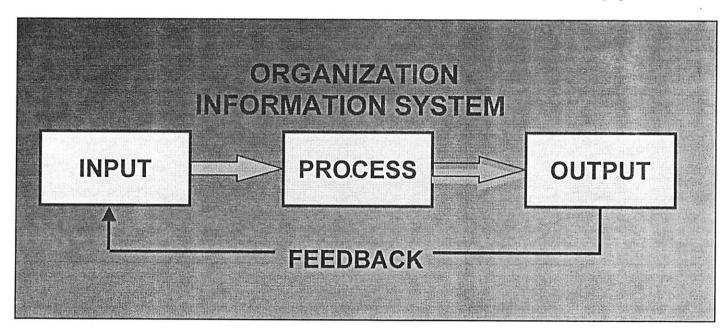
SYSTEM



FUNCTIONS OF AN INFORMATION SYSTEM ENVIRONMENT

Customers

Suppliers



Regulatory Agencies **Stockholders**

Competitors

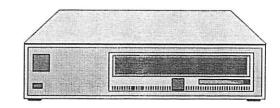
DATA & INFORMATION

 DATA: STREAMS OF RAW FACTS REPRESENTING EVENTS SUCH AS BUSINESS TRANSACTIONS

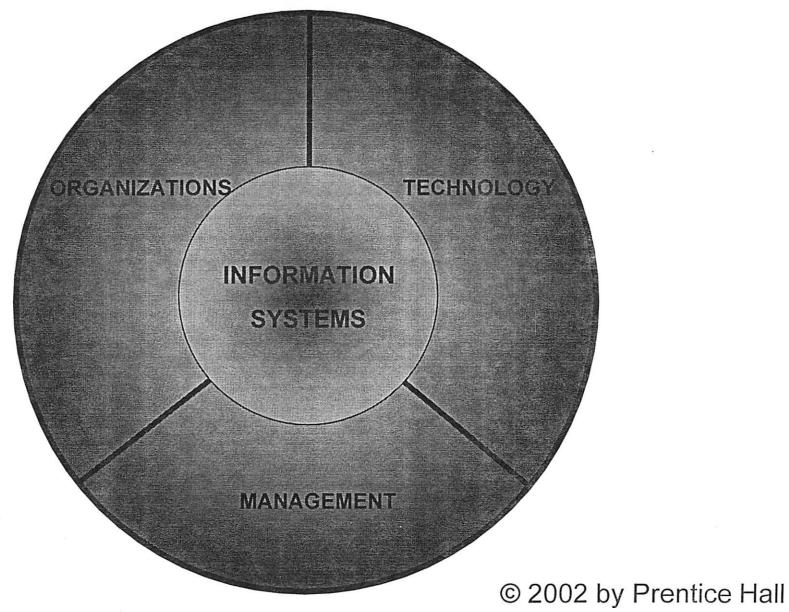
• INFORMATION: CLUSTERS OF FACTS MEANINGFUL & USEFUL TO HUMAN BEINGS IN PROCESSES SUCH AS MAKING DECISIONS

COMPUTER-BASED INFORMATION SYSTEMS (CBIS)

- FORMAL SYSTEMS
- FIXED DEFINITIONS OF DATA, PROCEDURES
- COLLECTING, STORING, PROCESSING, DISSEMINATING, USING DATA



INFORMATION SYSTEMS



ORGANIZATIONS

 PEOPLE: Managers, knowledge workers, data workers, production or service workers

 STRUCTURE: Organization chart, groups of specialists, products, geography

K

ORGANIZATIONS

OPERATING PROCEDURES:
 Standard Operating Procedures
 (SOP), rules for action

 POLITICS: Power to persuade, get things done

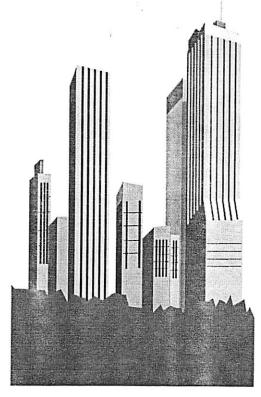
 CULTURE: Customs of behavior



MAJOR BUSINESS FUNCTIONS

- SALES & MARKETING
- MANUFACTURING
- FINANCE
- ACCOUNTING
- HUMAN RESOURCES

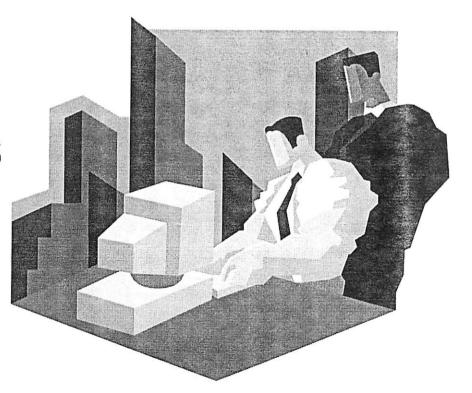




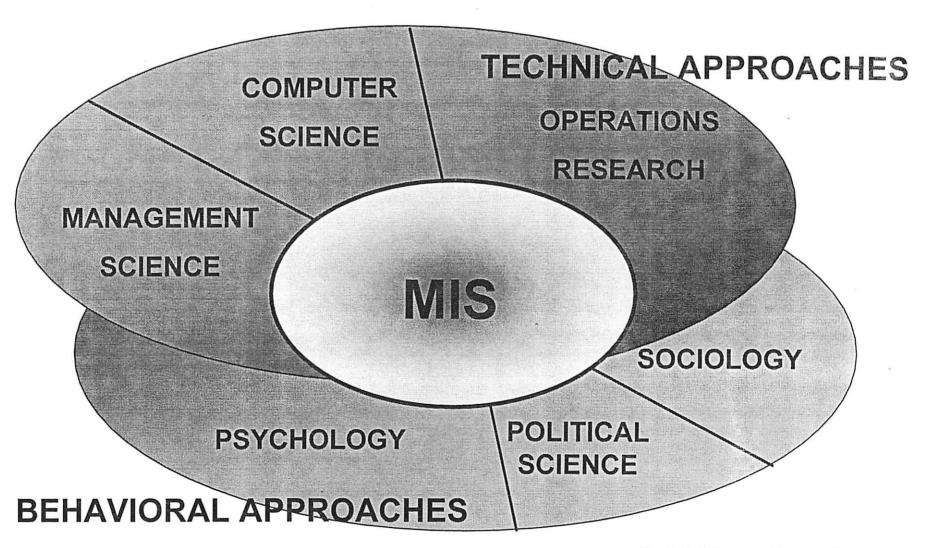
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COMPUTER TECHNOLOGY

- HARDWARE
- SOFTWARE
- STORAGE
- COMMUNICATIONS
- NETWORKS

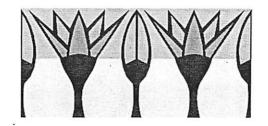


APPROACHES TO INFO SYSTEMS

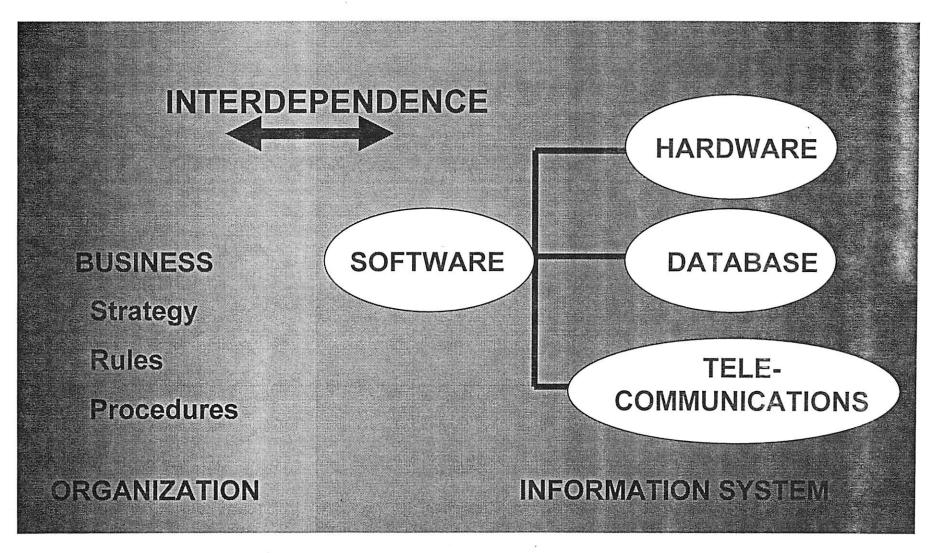


SOCIOTECHNICAL PERSPECTIVE

OPTIMIZE SYSTEM PERFORMANCE: TECHNOLOGY & ORGANIZATION MUTUALLY ADJUST TO ONE ANOTHER UNTIL FIT IS SATISFACTORY



SYSTEM INTERDEPENDENCE



SCOPE OF INFO SYSTEMS

1950s: TECHNICAL CHANGES

 60s-70s: MANAGERIAL CONTROL

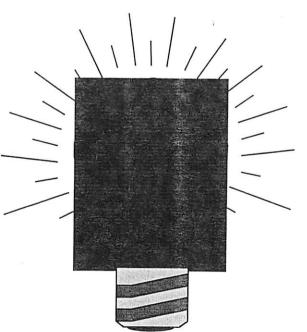
 80s-90s: INSTITUTIONAL CORE ACTIVITIES





WHAT YOU CAN DO ON THE INTERNET

- COMMUNICATE & COLLABORATE
- ACCESS INFORMATION
- DISCUSS
- OBTAIN INFORMATION
- ENTERTAIN
- TRANSACT BUSINESS



NEW OPTIONS FOR ORGANIZATIONAL DESIGN

- FLATTENING ORGANIZATIONS
- SEPARATING WORK FROM LOCATION
- REORGANIZING WORK-FLOWS
- INCREASING FLEXIBILITY
- REDEFINING ORGANIZATIONAL BOUNDARIES



THE DIGITAL FIRM

- ELECTRONIC COMMERCE
- ELECTRONIC BUSINESS
- ELECTRONIC MARKET: Information system links buyers & sellers to exchange information, products, services, payment

ELECTRONIC COMMERCE

- INTERNET LINKS BUYERS, SELLERS
- LOWERS TRANSACTION COSTS
- GOODS & SERVICES
 ADVERTISED, BOUGHT,

 EXCHANGED WORLDWIDE
- BUSINESS-TO-BUSINESS
 TRANSACTIONS INCREASING

ELECTRONIC BUSINESS

- INTRANET: Business builds private, secure network
- E-MAIL, WEB DOCUMENTS, GROUP SOFTWARE: Extends effective communication & control
- EXTRANET: Extension of Intranet to authorized externation
 users

chapter

MANAGING THE DIGITAL FIRM