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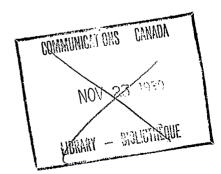
DIFFUSION OF TECHNOLOGY SURVEY IN THE SERVICE INDUSTRIES

Communications Canada Industry, Science and Technology Canada Statistics Canada Employment and Immigration Canada



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Canadä

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TABLE OF CONTENTS

<u>TABLE</u>
INTRODUCTION AND HIGHLIGHTS
SURVEY COVERAGE
DISTRIBUTION BY PROVINCE
DISTRIBUTION BY INDUSTRY DIVISION
DISTRIBUTION BY INDUSTRY MAJOR GROUP
DISTRIBUTION BY SIZE AND INDUSTRY DIVISION
DISTRIBUTION BY OWNERSHIP AND INDUSTRY
DISTRIBUTION BY PERCENTAGE OF EMPLOYMENT AND OWNERSHIP 6-1
DISTRIBUTION BY MULTI/SINGLE ESTABLISHMENTS AND INDUSTRY 7-1
TECHNOLOGY USE (MAJOR GROUP)
All Industries 8-1 Transportation 8-2 Communications 8-3 Wholesale Trade 8-4 Retail Trade 8-5 Finance & Insurance 8-6 Real Estate Operator & Insurance Agents 8-7 Business Service 8-8 Accommodation, Food & Beverage Services 8-9
TECHNOLOGY USE (DIVISION)
Transport

Wholesale Machinery, Equipment and Supplies Wholesale Other Products Retail Food, Beverage and Drug Retail Shoe, Apparel, Fabric and Yarn Retail Household Furniture, Appliances and Furnishings Retail Vehicles, Parts and Accessories, Sales and Service General Retail Merchandising Other Retail Stores Deposit Accepting Industries Consumer & Financing Industries Investment Industries Insurance Industries Other Financial Industries Parall Estate Operators Insurance & Real Estate Agents Business Services Industries Parall Estate Operators Business Services Industries Parall Estate Operators Parall Est	1112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 112121314 1121213 112121 1121213 112121 1
USE OF TECHNOLOGY BASED ON EMPLOYMENT	
All Industries 10 Transportation 10 Communications 10 Wholesale Trade 10 Retail Trade 10 Finance and Insurance 10 Real Estate Operator & Insurance Agents 10 Business Services 10 Accommodation, Food & Beverage Services 10	-2 -3 -4 -5 -6 -7 -8
USE OF TECHNOLOGY BY SIZE OF FIRM	
All Industries Transportation Communications Wholesale Trade Retail Trade Finance and Insurance Real Estate Operator & Insurance Agents Business Services 11- Accommodation, Food & Beverage Services 11- 11- 11- 11- 11- 11- 11- 11- 11- 11	-2-3-4-5-6-7-8
USE OF TECHNOLOGY BY OWNERSHIP	
All Industries	-1 -2

Communications 12- Wholesale Trade 12- Retail Trade 12- Finance and Insurance 12- Real Estate Operator & Insurance Agents 12- Business Services 12- Accommodation, Food & Beverage Services 12-
USE OF TECHNOLOGY BY SIZE AND OWNERSHIP
All Industries 13- Transportation 13- Communications 13- Wholesale Trade 13- Retail Trade 13- Finance and Insurance 13- Real Estate Operator & Insurance Agents 13- Business Services 13- Accommodation, Food & Beverage Services 13-
USE OF TECHNOLOGY BY REGION
Currently Using
NETWORKED PERSONAL COMPUTERS
All Industries
QUESTIONNAIRE

DIFFUSION OF TECHNOLOGY SURVEY IN THE SERVICE INDUSTRIES

Introduction

The ability of Canadian firms to adopt technology has a considerable impact on their ability to remain competitive. In light of concerns that Canada may be falling behind in the use of information technologies, the sponsors of this survey (Communications Canada; Industry, Science & Technology Canada; and Employment and Immigration Canada) commissioned Statistics Canada to conduct a survey of technology diffusion in the service industries. The purpose of this survey is to provide up-to-date information on the current and planned use of computer-based technologies and applications within establishments in Canada's service sector.

This survey was conducted by Statistics Canada in March 1989 as a mail-out survey with telephone follow-up. The survey covered all service industries, excluding public administration, educational, health and social services (see Survey Coverage for full list).

The survey's target universe was selected from the strata of large and medium sized companies (i.e. more than 20 employees) of the Survey of Employment and Payrolls, where size is based on number employed. A total of 2,718 responses were received, a remarkable 85% response rate for a voluntary survey.

Highlights

- As one would expect, the more established office computerization technologies such as personal computers, on-line terminals and mini-computers have been widely adopted in the service industries.
- Emphasis is now being placed by the businesses surveyed on relatively new technologies which are more oriented to networking. For example, local area networks, which allow office machines to communicate over limited distances, are used by 40% of all respondents and 17% more plan to introduce LANs within three years. New electronic messaging systems such as facsimile and private electronic mail are popular. 89% of respondents use facsimile and private electronic mail is currently used by 30% of respondents with 14% planning to introduce it within three years. Electronic data interchange (EDI) usage is relatively low at 19% but 16% more plan to introduce this technology during the next three years.
- Widely used applications were computerized financial systems (used by 88% of respondents), computerized inventory control (56%), and computerized order entry (50%). Significant growth is expected within the next three years for desktop publishing, human resource management systems, computer assisted

- education, expert systems, electronic scanning systems, electronic funds transfer and computer aided software engineering.
- Overall satisfaction with the technologies surveyed was very high. Over 90% of respondents felt their expectations had been met or exceeded.
- Establishments in communication, wholesale trade, finance and insurance and business services were the most likely to have introduced computer-based technologies. Accommodation, food and beverage service industries and retail trade industries usually had the lowest incidence of technology use. Similar results for leading and lagging industries were found in the Economic Council's Working With Technology Survey.
- Large organizations, those employing over 200, made greater use of the technologies than businesses employing less than 200. Examples of technologies where usage by large businesses was significantly higher are mainframe computers, local and wide area networks and human resource management.
- In general, foreign owned businesses made greater use of technologies than Canadian owned businesses. Technologies in which use by American owned businesses is at least 15% greater than use by Canadian owned businesses are as follows: desktop publishing, private electronic mail, wide area networks, computerized order entry and computerized inventory control.
- The Atlantic and the Prairie provinces are the slowest adopters of new technology, particularly for technologies such as mainframe computers, desktop publishing, computerized order entry and human resource management.

SURVEY COVERAGE

Only the following major groups were included as part of this survey.

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- 45 Transport
- 48 Communications
- 50 Wholesale Farm Products
- 51 Wholesale Petroleum Products
- 52 Wholesale Food Products
- 53 Wholesale Apparel Products
- 54 Wholesale Household Products
- 55 Wholesale Vehicle Products
- 56 Wholesale Hardware Products
- 57 Wholesale Machinery Products
- 59 Wholesale Other Products
- 60 Retail Food Products
- 61 Retail Apparel Products
- 62 Retail Furniture Products
- 63 Retail Vehicles Products
- 64 General Retail Products
- 65 Other Retail Products
- 70 Deposit Accepting Industries
- 71 Consumer & Financing Industries
- 72 Investment Industries
- 73 Insurance Industries
- 74 Other Financial Industries
- 75 Real Estate Operators
- 76 Insurance & Real Estate Agents
- 77 Business Services Industries
- 91 Accommodation Service Industries
- 92 Food & Beverage Service Industries

DISTRIBUTION BY PROVINCE

	Number of Responding Companies
Newfoundland	, 39
Prince Edward Island	13
Nova Scotia	82
New Brunswick	72
Québec	597
Ontario	1114
Manitoba	150
Saskatchewan	80
Alberta	293
British Columbia	267
Yukon	8
Northwest Territories	3
Canada	2718

DISTRIBUTION BY INDUSTRY DIVISION

Industry Division	NUMBER OF RESPONDING COMPANIES	% OF RESPONDING COMPANIES	% OF EMPLOYMENT REPRESENTED	# OF EMPLOYEES IN RESPONDING COMPANIES (000'S)
Transportation	,362	18.4	80.2	247.4
Communication	79	24.9	37.1	69.0
Wholesale Trade	652	14.0	58.9	171.4
Retail Trade	522	10.2	67.0	416.0
Finance and Insurance	231	19.4	68.3	223.2
Real Estate Operators and Financial Agents	135	8.9	59.9	50.7
Business Service	371	18.5	70.4	188.3
Accomodation, Food and Beverage Service	366	15.8	71.7	288.6
All Industries	2718	14.2	- 65.8	1654.6

DISTRIBUTION BY INDUSTRY MAJOR GROUP

INDUSTRY MAJOR GROUP	NUMBER OF RESPONDING COMPANIES	% OF RESPONDING COMPANIES	% OF EMPLOYMENT REPRESENTED
Transportation	362	19	82
Communication	79	25	37
Wholesale Trade			
Farm Products	20	16	48
Petroleum Products	24	9.8	62
Food, Beverage, Drug and Tobacco	89	16	68
Apparel and Dry Goods	12	6.4	32
Household Goods	14	11	57
Motor Vehicle, Parts and Accessories	73	20	57
Metals, Hardware, Plumbing, Heating	116	15	65
Machinery, Equipment and Supplies	210	14	55
Other Products	94	11	54
Retail Trade			
Food, Beverage and Drug	130	11	83
Shoe, Apparel, Fabric and Yarn	108	16	78
Household Furniture, Appliances and Furn.	32	6.7	70
Automotive Vehicles, Parts and Acessories	131	9.4	52
General Retail Merchandising	47	16	58
Other Retail Store	74	7.1	49
Finance and Insurance			
Deposit Accepting Intermediary	64	26	67
Consumer and Business Financing Interm.	19	19	56
Investment Intermediary	22	4.0	51
Insurance	97	54	77
Other Financial Intermediary	29	28	66
Real Estate Oper. & Fin. Agents			
Real Estate Operators	76	8.5	65
Insurance and Real Estate Agent	59	9.5	55
Business Service	371	18	70
Accom., Food & Beverage			
Accomodation Service	174	19	81
Food and Beverage Service	192	14	66
All Industries	2718	14	66

DISTRIBUTION BY SIZE AND INDUSTRY DIVISION

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INDUSTRY DIVISION	# OF COMPANIES WITH LESS THAN 200 EMPLOYEES	# OF COMPANIES WITH 200 EMPLOYEES OR MORE
Transportation ,	189	173
Communication	29	50
Wholesale Trade	439	213
Retail Trade	313	209
Finance and Insurance	82	149
Real Estate Operators and Financial Agents	76	59
Business Service	159	212
Accomodation, Food and Beverage Service	177	189
All Industries	1464	1254

DISTRIBUTION BY OWNERSHIP AND INDUSTRY

Industry Division	CANADIAN OWNERSHIP	USA OWNERSHIP	OTHER FOREIGN OWNERSHIP
Transportation	, 338	18	6
Communication	75	4	0
Wholesale Trade	519	103	30
Retail Trade	481	36	5
Finance and Insurance	180	28	23
Real Estate Operators and Financial Agents	119	10	6
Business Service	329	34	8
Accomodation, Food and Beverage Service	335	19	12
All Industries	2376	252	90

DISTRIBUTION BY PERCENTAGE OF EMPLOYMENT AND OWNERSHIP

INDUSTRY Division	CANADIAN OWNERSHIP	USA OWNERSHIP	OTHER FOREIGN OWNERSHIP
Transportation	, 95.9	2.1	2.0
Communication	79.6	20.4	0.0
Wholesale Trade	71.8	16.3	12.0
Retail Trade	71.6	20.8	7.7
Finance and Insurance	86.0	6.3	7.7
Real Estate Operators and Financial Agents	81.4	13.5	5.1
Business Service	74.7	20.0	5.3
Accomodation, Food and Beverage Service	73.8	20.0	6.3
All Industries	79.5	14.3	6.3

DISTRIBUTION BY MULTI/SINGLE ESTABLISHMENTS AND INDUSTRY

INDUSTRY DIVISION	MULTI-UNIT ESTABLISHMENT	SINGLE ESTABLISHMENT
Transportation	67	295
Communication	26	53
Wholesale Trade	357	295
Retail Trade	185	337
Finance and Insurance	99	132
Real Estate Operators and Financial Agents	49	86
Business Service	110	261
Accomodation, Food and Beverage Service	67	299
All Industries	960	1758

Table 8

Technology Use by Industry Division

TECHNOLOGY USE All Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	*	%	%	%	*	*
Personal computers	89.1	56.6	, 86.8	4.7	8.5	3.4	7.5
Online terminals	75.6	46.1	90.5	4.4	5.1	4.0	20.4
Mainframe computer	41.0	35.7	89.4	5.0	5.6	2.2	56.8
Mini-computer	54.3	39.8	86.3	6.8	6.9	4.4	41,4
Electronic mail - private	30.1	43.4	80.6	9.9	9.5	13.7	56.2
Electronic mail - public	10.0	42.6	82.1	14.1	3.8	8.6	81.4
Voice mail	5.6	55.6	82.6	10.7	6.7	7.2	87.2
Video conferencing	2.1	35.7	92.6	3.7	3.7	4.9	93.1
Facsimile	88.9	37.8	84.0	1.3	14.6	3.4	7.7
Desktop publishing	30.1	51.6	80.1	9.5	10.5	15.2	54.7
External databases	22.4	44.1	87.9	9.4	2.7	8.2	69.4
Telex	35.7	11.4	83.9	15.0	1.2	0.4	63.9
Local area networks	. 40.0	45.9	86.9	8.1	5.0	16.6	43.4
Wide area networks	28.9	38.6	91.2	3.7	5.1	10.0	61.1
Electronic data interchange	19.2	50.1	85.2	11.0	3.8	15.9	64.9
Mobile data communications	10.9	41.7	91.6	4.2	4.2	5.0	84.1
Satellite data distribution	3.3	42.2	85.4	10.1	4.5	4.6	92.1
Human resource management systems	33.4	35.0	88.6	9.2	2.2	15.7	50.9
Computerized order entry	50.0	31.8	90.7	5.7	3.6	9.0	41.0
Computerized inventory control	56.3	33.6	87.2	9.4	3.4	11.9	31.8
Expert systems for decision support tool	12.2	36.6	87.3	7.5	5.3	12.7	75.1
Computerized financial systems	87.8	31.1	90.0	6.2	3.8	3.7	8.5
Electronic scanning systems	14.5	45.3	84.3	9.9	5.9	14.4	71.2
Computer assisted education and training	22.0	44.2	86.2	9.7	4.2	11.2	66.7
Electronic funds transfer	17.7	37.6	94.1	2.8	3.0	8.9	73.3
Automatic teller machines	1.4	44.7	85.7	8.6	5.7	1.6	97.0
Transportation systems	12.5	35.4	88.3	6,6	5.0	4.0	83.6
Computer reservation systems	9,1	33.6	88.5	5.5	6.0	2.3	88,6
Automated storage and retrieval systems	9.6	35.6	85.6	8.8	5.6	4.4	86.0
Point of sale terminals	22.4	37.8	88.4	6.5	5.1	8.2	69.4
Smart cards	0.0	100.0	100.0	0.0	0.0	3.7	96.3
Computer-aided design (CAD)	14.1	44.5	84.3	5.4	10.3	4.5	81.4
Computer-aided engineering (CASE)	6.3	50.0	87.8	6.7	5.5	3.5	90.2
Computer-aided software engineering (CASE)		54.3	82.9	11.6	5.5	8.3	85.3
In-room management systems	1.7	28.3	90.7	7.0	2.3	1.8	96.5
In-room video systems	2.5	17.4	90.8	6.2	3.1	1.4	96.1
In-room check out systems	1.0	23.1	83.3	12.5	4.2	1.7	97.3
Property management systems	9.3	39.3	90.8	5.0	4.2	4.2	86.6

TECHNOLOGY USE

Transportation

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%	*	%	%	%
Personal computers	91.2	69.4	, 84.5	5.8	9.7	3.3	5.5
Online terminals	79.8	55.0	90.2	4.9	4.9	6.4	13.8
Mainframe computer	45.9	44.6	90.9	4.9	4.3	3.3	50.8
Mini-computer	58.6	48.1	86.5	6,3	7.2	6.6	34.8
Electronic mail - private	37.8	47.4	82.0	11.3	6.8	16.9	45.3
Electronic mail - public	7.2	26.9	87.0	4.3	8.7	10.2	82.6
Voice mail	4.4	25.0	80.0	20.0	0.0	8.0	87.6
Video conferencing	0.6	0.0	100.0	0.0	0.0	3.6	95.9
Facsimile	93.4	43.5	82.9	1.5	15.6	4.1	2.5
Desktop publishing	32.3	53.0	79.8	9.6	10.5	19.1	48.6
External databases	24.6	44.9	88.5	10.3	1.1	11.6	63.8
Telex	34.5	6.4	87.3	12.7	0.0	0.3	65.2
Local area networks	39.0	56.7	83.3	10.1	6.5	21.5	39.5
Wide area networks	29.6	41.1	90.4	2.9	6.7	11.6	58.8
Electronic data interchange	19.6	54.9	82.9	11.4	5.7	22.4	58.0
Mobile data communications	21.3	40.3	91.9	8.1	0.0	8.6	70.2
Satellite data distribution	3.9	. 50.0	84.6	7.7	7.7	5.8	90.3
Human resource management systems	43.1	41.0	89.2	9.5	1.4	16.6	40.3
Computerized order entry	43.1	34.6	90.6	4.7	4.7	12.4	44.5
Computerized inventory control	52.2	40.2	85.2	9.3	5.5	16.3	31.5
Expert systems for decision support tool	12.4	42.2	90.5	7.1	2.4	14.4	73.2
Computerized financial systems	90.3	40.1	87.5	6.9	5.6	4.4	5.2
Electronic scanning systems	17.1	40.3	81.0	10.3	8.6	16.3	66.6
Computer assisted education and training	26.2	47.4	78.7	16.0	5.3	11.0	62.7
Electronic funds transfer	14.1	33.3	93.9	6.1	0.0	11.0	74.9
Automatic teller machines	•		•				
Transportation systems	51.7	41.2	89.4	5.6	5.0	11.0	37.3
Computer reservation systems	16.6	41.7	89.5	5.3	5.3	3.6	79.8
Automated storage and retrieval systems	12.7	54.3	79.5	11.4	9.1	4.4	82.9
Point of sale terminals	9.9	36.1	94.1	5.9	0.0	5.0	85.1
Smart cards					. 1		•
Computer-aided design (CAD)	19.6	57.7	80.0	1.5	18.5	8.8	71.5
Computer-aided engineering (CASE)	9.7	57.1	90.9	3.0	6.1	9.1	81.2
Computer-aided software engineering (CASE)	7.7	67.9	87.5	12.5	0.0	14.1	78.2
In-room management systems							
In-room video systems	•						
In-room check out systems							
Property management systems	9.4	64.7	90.9	6.1	3.0	5.8	84.8

TECHNOLOGY USE Communications

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	%	`%	*	%
Personal computers	100.0	67.1	, 87.3	0.0	12.7	0.0	0.0
Online terminals	91.1	55,6	82.9	7.1	10.0	0.0	8.9
Mainframe computer	49.4	53.8	83.8	8.1	8.1	1.3	49.4
Mini-computer	67.1	52.8	81.1	3,8	15.1	2.5	30.4
Electronic mail - private	44.3	57.1	72.7	9.1	18.2	26.6	29.1
Electronic mail - public	36.7	51.7	85.7	7.1	7.1	7.6	55.7
Voice mail	17.7	85.7	78.6	7.1	14.3	12.7	69.6
Video conferencing	12.7	50.0	90.0	10.0	0.0	16.5	70.9
Facsimile	98.7	52.6	75.3	1.3	23,4	0.0	1.3
Desktop publishing	50.6	62.5	84.6	7.7	7.7	20.3	29.1
External databases	43.0	52.9	84.8	12.1	3.0	10.1	46.8
Telex	49.4	10.3	84.2	13.2	2.6	3.8	46.8
Local area networks	60.8	66.7	93.8	2.1	4.2	19.0	20.3
Wide area networks	39.2	58.1	93.5	3.2	3.2	16.5	44.3
Electronic data interchange	20.3	87.5	81.3	12.5	6.3	19.0	60.8
Mobile data communications	31.6	60,0	91.7	.0.0	8.3	13.9	54.4
Satellite data distribution	15.2	41.7	100.0	0.0	0.0	16.5	68.4
Human resource management systems	59.5	42.6	90.9	9.1	0.0	20.3	20.3
Computerized order entry	65.8	25.0	98.0	2.0	0.0	8.9	25.3
Computerized inventory control	69.6	38.2	87.0	11.1	1.9	8.9	21.5
Expert systems for decision support tool	10,1	50.0	100.0	0.0	0.0	15.2	74.7
Computerized financial systems	93.7	32.4	93.2	2.7	4.1	0.0	6.3
Electronic scanning systems	24.1	57.9	94.4	0.0	5.6	21.5	54.4
Computer assisted education and training	31.6	44.0	96.0	4.0	0.0	21.5	46.8
Electronic funds transfer	21.5	47.1	100.0	0.0	0.0	6.3	72.2
Automatic teller machines							
Transportation systems	5.1	50.0	100.0	0.0	0.0	0.0	94.9
Computer reservation systems	3.8	66.7	100.0	0.0	0.0	2.5	93.7
Automated storage and retrieval systems	10.1	25.0	87.5	0.0	12.5	7.6	82.3
Point of sale terminals	13.9	45.5	81.8	18.2	0.0	8.9	77.2
Smart cards							
Computer-aided design (CAD)	55.7	47.7	88.4	2.3	9.3	3.8	40.5
Computer-aided engineering (CASE)	21.5	47.1	82.4	0.0	17.6	11.4	67.1
Computer-aided software engineering (CASE)	11.4	55.6	66.7	22.2	11.1	12.7	75.9
In-room management systems		,					
In-room video systems				•	· :		
In-room check out systems					,		-
Property management systems	7.6	66.7	100.0	0.0	0.0	5.1	87.3

TECHNOLOGY USE Wholesale Trade Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	*	*	*	*
Personal computers	91.6	52.1	, 88.5	4.2	7.3	2.9	5.5
Online terminals	85.7	43.1	89.5	3.8	6.7	2.9	11.3
Mainframe computer	44.8	29.8	88.2	5,9	5.9	1.8	53.4
Mini-computer	62.3	38.7	84.9	7.9	7.2	2.6	35.1
Electronic mail - private	31.9	37.0	79.2	11.4	9.4	12.3	55.8
Electronic mail - public	12.3	46.3	74.7	21.5	3.8	8.3	79.4
Voice mail	4.9	46,9	93.5	0.0	6.5	6.0	89.1
Video conferencing	2.0	30.8	100.0	0.0	0.0	4.6	93.4
Facsimile	95.6	32.7	83.2	1.0	15.8	0.8	3.7
Desktop publishing	30.7	48.5	79.2	9.4	11.5	16.0	53.4
External databases	17.0	36.9	89.7	8.4	1.9	9.2	73.8
Telex	49.1	9.1	83.0	16.0	1.0	0.0	50.9
Local area networks	40.3	36.1	85.8	7.9	6.3	16.0	43.7
Wide area networks	34.7	31.4	90.8	5.5	3.7	8.7	56.6
Electronic data interchange	24.8	51.9	84.3	12.4	3.3	23.2	52.0
Mobile data communications	12.0	44.9	86.8	5.3	7.9	6.6	81.4
Satellite data distribution	4.0	23.1	84.6	7.7	7.7	5.2	90.8
Human resource management systems	30.4	32.3	88.1	9.3	2.6	15.8	53.8
Computerized order entry	84.7	32.8	87.4	6.2	6.4	5.8	9.5
Computerized inventory control	85.4	30.9	87.1	7.7	5.3	7.5	7.1
Expert systems for decision support tool	14.7	33.3	88.0	3,3	8.7	10.7	74.5
Computerized financial systems	91.4	26.2	91.2	6.0	2.8	2.8	5.8
Electronic scanning systems	14.6	42.1	84.3	7.9	7.9	18.9	66.6
Computer assisted education and training	22.1	36.1	86.8	8.1	5.1	10.3	67.6
Electronic funds transfer	16.0	31.7	90.5	4.2	5.3	8.4	75.6
Automatic teller machines							
Transportation systems	12.7	25.3	84.0	9,3	6.7	5.8	81.4
Computer reservation systems	2.5	37.5	86.7	6.7	6.7	1.2	96.3
Automated storage and retrieval systems	10.4	30.9	89.1	4.7	6.3	5.8	83.7
Point of sale terminals	19.2	37.6	90.1	3.3	6.6	8.9	71.9
Smart cards							
Computer-aided design (CAD)	14.6	32.6	80.2	12.1	7.7	5.4	80.1
Computer-aided engineering (CASE)	6.4	33.3	82.9	14.6	2.4	3.5	90.0
Computer-aided software engineering (CASE)	6.6	32.6	87.5	5,0	7.5	8.1	85.3
In-room management systems							•
In-room video systems				•			•
In-room check out systems				•		• .	
Property management systems	4.1	37.0	91.7	4.2	4.2	2.0	93.9

TECHNOLOGY USE Retail Trade Industries

	Currently USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	*	*	*	*	*
Personal computers	83.5	46.1	, 89.6	4.2	6.2	4.4	12.1
Online terminals	66.7	42.5	92.4	4.4	3.2	4.2	29.1
Mainframe computer	38.3	29.5	92.8	3.6	3.6	1.7	60.0
Mini-computer	46.9	37.6	91.7	4.6	3.7	4.6	48.5
Electronic mail - private	22.4	39.3	83.8	9.4	6.8	8.0	69.5
Electronic mail - public	6.3	42.4	96.9	3.1	0.0	5.0	88.7
Voice mail	4.6	50.0	87.5	8.3	4.2	2.5	92.9
Video conferencing	1.7	33.3	88.9	0.0	11.1	1.9	96.4
Facsimile	80.7	34.2	87.3	1.0	11.7	6.1	13.2
Desktop publishing	18.6	45.4	77.9	7.4	14.7	9.6	71.8
External databases	9.4	38.8	87.8	8.2	4.1	8.2	82.4
Telex	18.2	13.7	76.8	18.9	4.2	0.2	81.6
Local area networks	32.6	38.2	91.6	5.4	3.0	13.2	54.2
Wide area networks	22.2	34.5	89.6	3.5	7.0	6.7	71.1
Electronic data interchange	15.5	45.7	83.5	13.9	2.5	12.3	72.2
Mobile data communications	6.7	. 28.6	100.0	0.0	0.0	1.9	91.4
Satellite data distribution	1.9	60.0	70.0	20.0	10.0	3.6	94.4
Human resource management systems	23.2	30.6	92.4	5.9	1.7	12.5	64.4
Computerized order entry	61.5	27.7	94.3	5.1	0.6	9.2	29.3
Computerized inventory control	66.3	31.2	90.1	8.4	1.5	11.7	22.0
Expert systems for decision support tool	10.9	36.8	87.5	10.7	1.8	7.7	81.4
Computerized financial systems	83.5	26.4	92.3	5.7	1.9	3.8	12.6
Electronic scanning systems	22.4	47.0	87.6	8.0	4.4	14.6	63.0
Computer assisted education and training	14.2	48.6	84.7	11.1	4.2	6.9	78.9
Electronic funds transfer	17.4	35.2	93.3	3.4	3,4	9,2	73.4
Automatic teller machines	•	•					•
Transportation systems	5.4	28.6	79.2	16.7	4.2	1.9	92.7
Computer reservation systems	3.1	43.8	100.0	0.0	0.0	0.8	96.2
Automated storage and retrieval systems	7.3	31.6	86.8	7.9	5,3	2.7	90.0
Point of sale terminals	46.9	36.3	87.7	6.8	5.5	12.5	40.6
Smart cards	•				•		•
Computer-aided design (CAD)	6.7	34.3	87.9	6.1	6.1	2.1	91.2
Computer-aided engineering (CASE)	1.9	40.0	88.9	11.1	0.0	1.0	97.1
Computer-aided software engineering (CASE)	2.1	54.5	81.8	9.1	9.1	2.7	95.2
In-room management systems							•
In-room video systems				•			
In-room check out systems							
Property management systems	3.3	35.3	82.4	17.6	0.0	3.3	93.5

TECHNOLOGY USE Finance and Insurance Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	%	*	%	*	*
Personal computers	95.2	66.8	, 85.8	5.9	8.2	1.3	3.5
Online terminals	93.1	47.9	93.0	3.3	3.8	0.4	6.5
Mainframe computer	66.7	40.3	90.6	5.4	4.0	1.7	31.6
Mini-computer	52.8	38.5	82.4	10.9	6.7	5.6	41.6
Electronic mail - private	51.9	54.2	75.4	10.2	14.4	18.6	29.4
Electronic mail - public	13.9	34.4	83.3	13.3	3.3	12.6	73.6
Voice mail	9.1	66.7	66.7	19.0	14.3	15.6	75.3
Video conferencing	3.0	28.6	100.0	0.0	0.0	8.7	88.3
Facsimile	94.4	45.9	86.0	2.8	11.2	1.7	3.9
Desktop publishing	50.2	54.3	84.1	9.7	6.2	19.5	30.3
External databases	48.1	45.9	92.7	6.4	0.9	8.2	43.7
Telex	44.6	18.4	86.1	12.9	1.0	0.4	55.0
Local area networks	55.4	57.8	81.6	14.4	4.0	22.5	22.1
Wide area networks	48.5	49.1	93.5	2.8	3.7	15.2	36.4
Electronic data interchange	29.9	49.3	86.2	12.3	1.5	13.9	56.3
Mobile data communications	6.5	46.7	85.7	14.3	0.0	4.3	89.2
Satellite data distribution	4.8	45.5	90.9	9.1	0.0	4.3	90.9
Human resource management systems	53.2	24.4	88.1	10.2	1.7	16.5	30.3
Computerized order entry	28.6	31.8	87.5	10.9	1.6	6.5	64.9
Computerized inventory control	35.1	35.8	88.5	11.5	0.0	12.1	52.8
Expert systems for decision support tool	10.8	32.0	92.0	8.0	0.0	29.4	59.7
Computerized financial systems	90.5	32.5	90.0	9.5	0.5	3.0	6.5
Electronic scanning systems	14.7	47.1	87.5	12.5	0.0	13.0	72.3
Computer assisted education and training	36.8	47.1	84.1	13.4	2.4	18.6	44.6
Electronic funds transfer	41.1	47.4	93.4	3.3	3.3	12.6	46.3
Automatic teller machines	16.5	44.7	85.7	8.6	5.7	5.6	77.9
Transportation systems	3.5	25.0	100.0	0.0	0.0	1.3	95.2
Computer reservation systems	2.6	16.7	100.0	0.0	0.0	1.3	96.1
Automated storage and retrieval systems	12.1	35.7	81.5	18.5	0.0	6.5	81.4
Point of sale terminals	6.9	75.0	93.3	0.0	6.7	12.1	81.0
Smart cards	0.4	100.0	100.0	0.0	0.0	10.8	88.7
Computer-aided design (CAD)	10.0	30.4	95.7	4.3	0.0	5.2	84.8
Computer-aided engineering (CASE)	2.6	33.3	100.0	0.0	0.0	1.7	95.7
Computer-aided software engineering (CASE)	12.1	60.7	75.0	17.9	7.1	19.9	68.0
In-room management systems	•	•			•	•	•
In-room video systems					•	•	•
In-room check out systems		•			•		•
Property management systems	10.4	33.3	87.5	12.5	0.0	5.6	84.0

TECHNOLOGY USE Real Estate Operator and Insurance Agents

•	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%	%	%	*	*
Personal computers	91.9	57.3	, 82.0	6.6	11.5	2.2	5.9
Online terminals	85.2	46.1	90.3	6.2	3.5	0.7	14.1
Mainframe computer	34.8	46.8	88.9	4.4	6.7	0.7	64.4
Mini-computer	53.3	38.9	84.1	8.7	7.2	5.9	40.7
Electronic mail - private	31.9	39.5	85.7	2.4	11.9	17.0	51.1
Electronic mail - public	5.9	50.0	85.7	14.3	0.0	9.6	84.4
Voice mail	5,2	57.1	66.7	33.3	0.0	10.4	84.4
Video conferencing	0.7	0.0	100.0	0.0	0.0	3.7	95.6
Facsimile	94.1	42.5	81.6	0.8	17.6	0.7	5.2
Desktop publishing	34.1	52.2	78.6	9.5	11.9	20.0	45.9
External databases	28.9	43.6	86.5	8.1	5.4	5.9	65.2
Telex	25.2	14.7	87.5	12.5	0.0	0.0	74.8
Local area networks	43.7	57.6	84.2	7.0	8.8	14.8	41.5
Wide area networks	25.9	45.7	85.7	5.7	8.6	7.4	66.7
Electronic data interchange	14.8	45.0	94.4	0.0	5.6	11.1	74.1
Mobile data communications	8.9	16.7	100.0	0.0	0.0	5.2	85.9
Satellite data distribution	0.7	100.0	100.0	0.0	0.0	2.2	97.0
Human resource management systems	33.3	37.8	83.7 ⁻	14.0	2.3	16.3	50.4
Computerized order entry	23.7	37.5	90.6	6.3	3.1	8.9	67.4
Computerized inventory control	28.1	34.2	86.8	10.5	2.6	14.1	57.8
Expert systems for decision support tool	15.6	47.6	85.7	4.8	9.5	9.6	74.8
Computerized financial systems	90.4	28.7	89.7	5.2	5.2	2.2	7.4
Electronic scanning systems	5.9	62.5	75.0	12.5	12.5	11.1	83.0
Computer assisted education and training	20.0	40.7	84.6	7.7	7 .7	16,3	63.7
Electronic funds transfer	23.0	41.9	93,3	0.0	6.7	7.4	69.6
Automatic teller machines		•		•		•	
Transportation systems	0.7	100.0	100.0	0.0	0.0	0.7	98.5
Computer reservation systems	8.1	0.0	90.0	0.0	10.0	0.7	91.1
Automated storage and retrieval systems	9.6	30.8	90.0	10,0	0.0	5.2	85.2
Point of sale terminals	6.7	22.2	88.9	11.1	0.0	3.7	89.6
Smart cards		•	,			•	
Computer-aided design (CAD)	10.4	71.4	64.3	0.0	35.7	8.1	81.5
Computer-aided engineering (CASE)	3.0	75.0	75.0	25.0	0.0	5.2	91.9
Computer-aided software engineering (CASE)	2.2	66.7	66.7	33.3	0.0	9.6	88.1
In-room management systems					•	•	•
In-room video systems						•	•
In-room check out systems	•						
Property management systems	43.0	34.5	90.9	3.6	5.5	3.7	53.3

TECHNOLOGY USE Business Service Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%	*	*	*	*
Personal computers	92.5	62.4	, 87.4	2.6	10.0	1.9	5.7
Online terminals	71.2	48.9	90.4	4.6	5.0	6.2	22.6
Mainframe computer	35.3	38.2	88.4	3.1	8.5	2.4	62.3
Mini-computer	58.8	39.4	86.4	5.6	8.0	4.3	36.9
Electronic mail - private	31.3	42.2	80.7	9.6	9.6	19.1	49.6
Electronic mail - public	14.6	48.1	77.4	20.8	1.9	13.2	72.2
Voice mail	7.3	74.1	80.8	11.5	7.7	11.6	81.1
Video conferencing	3.5	46.2	83.3	8.3	8.3	8.1	88.4
Facsimile	89.5	43.4	84.6	1.5	13.9	2.4	8,1
Desktop publishing	36.9	56.2	77.0	11.1	11.9	15.6	47.4
External databases	38.3	52.1	84.9	10.8	4.3	6.7	55.0
Telex	39.4	15.1	80.0	19.3	0.7	0.8	59.8
Local area networks	51.2	48.4	87.2	8.0	4.8	16.4	32,3
Wide area networks	29.9	37.8	92.6	1.9	5.6	12.9	57.1
Electronic data interchange	18.9	50.0	87.0	8.7	4.3	13.5	67.7
Mobile data communications	8.4	45.2	93.5	0.0	6.5	6.2	85.4
Satellite data distribution	2.7	70.0	80.0	20.0	0.0	5.4	91.9
Human resource management systems	38.5	46.2	85.5	9.4	5.1	18.1	43.4
Computerized order entry	26.4	40.8	93.8	4.1	2,1	9.4	64.2
Computerized inventory control	28.3	41.9	. 81.7	15.4	2.9	10.0	61.7
Expert systems for decision support tool	12.7	38.3	83.0	12.8	4.3	18.1	69.3
Computerized financial systems	89.5	40.1	88.6	6.8	4.6	3.8	6.7
Electronic scanning systems	13.7	45.1	74.0	20.0	6.0	14.3	72.0
Computer assisted education and training	27.5	52.9	90.8	5.1	4.1	13.2	59.3
Electronic funds transfer	15.4	33.3	98.1	0.0	1.9	7.0	77.6
Automatic teller machines	•		•			•	
Transportation systems	5.4	40.0	94.7	0.0	5.3	3.2	91.4
Computer reservation systems	3.2	33.3	100.0	0.0	0.0	2.2	94.6
Automated storage and retrieval systems	10.5	41.0	81.6	10.5	7.9	3.8	85.7
Point of sale terminals	2.2	50.0	87.5	0.0	12.5	3.2	94.6
Smart cards							
Computer-aided design (CAD)	22.6	53.6	85.7	4.8	9.5	2.4	74.9
Computer-aided engineering (CASE)	14.0	65.4	90.0	4.0	6.0	3.0	83.0
Computer-aided software engineering (CASE)		70.5	82.9	12.2	4.9	8.9	79.2
In-room management systems			•				
In-room video systems							
In-room check out systems							
Property management systems	4.3	37.5	100.0	0.0	0.0	2.7	93.0

TECHNOLOGY USE Accommodation, Food & Beverage Services

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	%	%	%	*
Personal computers	80.1	49.8	, 83.9	7.2	8.9	6.8	13.1
Online terminals	52.5	38.5	91.0	4.3	4.8	5.7	41.8
Mainframe computer	23.5	26.7	84.5	7.1	8.3	3.3	73.2
Mini-computer	40.2	32.0	86.9	6.9	6.2	4.1	55.7
Electronic mail - private	11.5	38.1	89.7	7.7	2.6	8.5	80.1
Electronic mail - public	2.7	20.0	90.0	0.0	10.0	5.2	92.1
Voice mail	3.3	33.3	91.7	8.3	0.0	3.0	93.7
Video conferencing	0,3	0.0	100.0	0.0	0.0	3.0	96.7
Facsimile	76.5	28.2	83.7	1.4	14.9	7.1	16.4
Desktop publishing	18.0	47.0	83.9	9.7	6.5	11.7	70.2
External databases	9.6	25.7	82.9	14.3	2.9	4.9	85.5
Telex	29.8	10.1	90.6	8.5	0.9	0.3	69.9
Local area networks	24.0	30.7	91.7	6.0	2.4	14.2	61.7
Wide area networks	12.8	36.2	93.5	2.2	4.3	9.0	78.1
Electronic data interchange	8.7	28.1	90.3	3.2	6.5 ·	6.6	84.7
Mobile data communications	6.0	40.9	90.0	0.0	10.0	0.5	93.4
Satellile data distribution	1.6	16.7	83.3	16.7	0.0	1.4	97.0
Human resource management systems	20.5	26.7	90.5	9.5	0.0	15.0	64.5
Computerized order entry	22.4	26.8	92.4	6.3	1.3	12.3	65.3
Computerized inventory control	43.7	32.5	87.0	11.7	1.3	17.2	39.1
Expert systems for decision support tool	8.7	28.1	80.6	9.7	9.7	6.3	85.0
Computerized financial systems	79.2	27.2	88.2	4.7	7.2	6.0	14.8
Electronic scanning systems	1.9	42.9	100.0	0.0	0.0	4.9	93.2
Computer assisted education and training	12.8	34.0	91.1	6.7	2.2	8.5	78.7
Electronic funds transfer	9.8	38.9	100.0	0.0	0.0	8.2	82.0
Automatic teller machines	•		•			•	
Transportation systems	2.2	12.5	100.0	0.0	0.0	1.1	96.7
Computer reservation systems	33.6	30.9	84.6	7.7	7.7	6.3	60.1
Automated storage and retrieval systems	5.7	14.3	95.2	4.8	0.0	2.7	91.5
Point of sale terminals	43.4	36.5	86.8	8.6	4.6	8.5	48.1
Smart cards			•			•	
Computer-aided design (CAD)	4.4	18.8	100.0	0.0	0.0	2.7	92.9
Computer-aided engineering (CASE)	1.1	0.0	100.0	0.0	0.0	1.1	97.8
Computer-aided software engineering (CASE)	2.5	11.1	100.0	0.0	0.0	1.4	96.2
In-room management systems	12.6	28.3	90.7	7.0	2.3	7.1	80.3
In-room video systems	18.9	17.4	90.8	6.2	3.1	5.2	76.0
In-room check out systems	7.1	23.1	83.3	12.5	4.2	10.4	82.5
Property management systems	19.1	32.9	90.9	1.5	7.6	8.2	72.7

Table 9

Technology Use by Major Group

TECHNOLOGY USE

Transportation

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	%	%	%	%
Personal computers	91.2	69.4	, 84.5	5.8	9.7	3.3	5.5
Online terminals	79.8	55.0	90.2	4.9	4.9	6.4	13.8
Mainframe computer	45.9	44.6	90.9	4.9	4.3	3.3	50.8
Mini-computer	58.6	48.1	86.5	6.3	7.2	6.6	34.8
Electronic mail - private	37.8	47.4	82.0	11.3	6.8	16.9	45.3
Electronic mail - public	7.2	26.9	87.0	4.3	8.7	10.2	82.6
Voice mail	4.4	25.0	80.0	20.0	. 0.0	` 8.0	87.6
Video conferencing	0.6	0.0	100.0	0.0	0.0	3.6	95.9
Facsimile	93.4	43.5	82.9	1.5	15.6	4.1	2.5
Desktop publishing	32.3	53.0	79.8	9.6	10.5	19.1	48.6
External databases	24.6	44.9	88.5	10.3	1.1	11.6	63.8
Telex	34.5	6.4	87.3	12.7	0.0	0.3	65.2
Local area networks	39.0	56.7	83.3	10.1	6.5	21.5	39.5
Wide area networks	29.6	41.1	90.4	2.9	· 6.7	11.6	58.8
Electronic data interchange	19.6	54.9	82.9	11.4	5.7	22.4	58.0
Mobile data communications	21.3	40,3	91.9	8.1	0.0	8.6	70.2
Satellite data distribution	3.9	50.0	84.6	7.7	7.7	5.8	90.3
Human resource management systems	43.1	41.0	89.2	9.5	1.4	16.6	40.3
Computerized order entry	43.1	34.6	90.6	4.7	4.7	12.4	44.5
Computerized inventory control	52.2	40.2	85.2	9.3	5.5	16.3	31.5
Expert systems for decision support tool	12.4	42.2	90.5	7.1	2.4	14.4	73.2
Computerized financial systems	90.3	40.1	87.5	6.9	5.6	4.4	5.2
Electronic scanning systems	17.1	40.3	81.0	10.3	8.6	16.3	66.6
Computer assisted education and training	26.2	47.4	78.7	16.0	5.3	11.0	62.7
Electronic funds transfer	14,1	33.3	93.9	6.1	0.0	11.0	74.9
Automatic teller machines		•		•	•		
Transportation systems	51.7	41.2	89.4	5.6	5.0	11.0	37.3
Computer reservation systems	16.6	41.7	89.5	5.3	5.3	3,6	79.8
Automated storage and retrieval systems	12.7	54.3	79.5	11.4	9.1	4.4	82.9
Point of sale terminals	9.9	36.1	94.1	5.9	0.0	5.0	85.1
Smart cards						•	•
Computer-aided design (CAD)	19.6	57.7	80.0	1.5	18.5	8.8	71.5
Computer-aided engineering (CASE)	9.7	57.1	90.9	3.0	6.1	9.1	81.2
Computer-aided software engineering (CASE)	7.7	67.9	87.5	12.5	0.0	14.1	78.2
In-room management systems	•						
In-room video systems					•		,
In-room check out systems						•	•
Property management systems	9.4	64.7	90.9	6.1	3.0	5.8	84.8

TECHNOLOGY USE Communications

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS,	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	%	*	*	%	*
Personal computers	100.0	67.1	, 87.3	0.0	12.7	0.0	0.0
Online terminals	91.1	55.6	82.9	7.1	10.0	0.0	8.9
Mainframe computer	49.4	53.8	. 83,8	8.1	8.1	1.3	49.4
Mini-computer	67.1	52.8	81.1	3.8	15.1	2.5	30.4
Electronic mail - private	44.3	57.1	72.7	9.1	18.2	26.6	29.1
Electronic mail - public	36.7	51.7	85.7	7.1	7.1	7.6	55.7
Voice mail	17.7	85.7	78.6	7.1	14.3	12.7	69.6
Video conferencing	12.7	50.0	90.0	10.0	0.0	16,5	70.9
Facsimile	98.7	52.6	75.3	1.3	23.4	0.0	1.3
Desktop publishing	50.6	62.5	84.6	7.7	7.7	20.3	29.1
External databases	43.0	52.9	84.8	12.1	3.0	10.1	46.8
Telex	49.4	10.3	84.2	13.2	2.6	. 3.8	46.8
Local area networks	60.8	66.7	93.8	2.1	4.2	19.0	20.3
Wide area networks	39.2	58.1	93.5	3.2	3.2	16.5	44.3
Electronic data interchange	20.3	87.5	81.3	12.5	6.3	19.0	60.8
Mobile data communications	31.6	60.0	91.7	0.0	8.3	13.9	54.4
Satellite data distribution	15.2	41.7	100.0	0.0	0.0	16.5	68.4
Human resource management systems	59.5	42.6	90.9	9.1	0.0	20.3	20.3
Computerized order entry	65.8	25.0	98.0	2.0	0.0	8.9	25.3
Computerized inventory control	69.6	38.2	87.0	11.1	1.9	8.9	21.5
Expert systems for decision support tool	10.1	50.0	100.0	0.0	0.0	15.2	74.7
Computerized financial systems	93.7	32.4	93.2	2.7	4.1	0.0	6.3
Electronic scanning systems	24.1	57.9	94.4	0.0	5.6	21.5	54.4
Computer assisted education and training	31.6	44.0	96.0	4.0	0.0	21.5	46.8
Electronic funds transfer	21.5	47.1	100.0	0.0	0.0	6.3	72.2
Automatic teller machines	•				,	•	
Transportation systems	5.1	50.0	100.0	0.0	0,0	0.0	94.9
Computer reservation systems	3.8	66.7	100.0	0.0	0.0	2.5	93.7
Automated storage and retrieval systems	10.1	25.0	87.5	0.0	12.5	7.6	82.3
Point of sale terminals	13.9	45.5	81.8	18.2	0.0	8.9	77.2
Smart cards	•						•
Computer-aided design (CAD)	55.7	47.7	88.4	2.3	9.3	3.8	40.5
Computer-aided engineering (CASE)	21.5	47.1	82.4	0.0	17.6	11.4	67.1
Computer-aided software engineering (CASE)	11.4	55.6	66.7	22.2	11.1	12.7	75.9
In-room management systems							
In-room video systems							
In-room check out systems							•
Property management systems	7.6	66.7	100.0	0.0	0.0	5.1	87.3

TECHNOLOGY USE Wholesale Farm Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	*	%	*	*
Personal computers	95.0	52.6	, 100.0	0.0	0.0	0.0	5.0
Online terminals	90.0	11.1	100.0	0.0	0.0	0.0	10.0
Mainframe computer	35.0	0.0	100.0	0.0	0.0	0.0	65.0
Mini-computer	85.0	11.8	93.8	6.3	0.0	5.0	10.0
Electronic mail - private	30.0	33.3	83.3	16,7	0.0	10.0	60.0
Electronic mail - public	30.0	16.7	60.0	40.0	0.0	0,0	70.0
Voice mail	0.0			•		15.0	85.0
Video conferencing	10.0	0.0	100.0	0.0	0.0	0.0	90.0
Facsimile	100.0	25.0	84.2	0.0	15.8	0.0	0.0
Desktop publishing	25.0	0.0	100.0	0.0	0.0	5.0	70.0
External databases	20.0	25.0	100.0	0.0	0.0	10.0	70.0
Telex	65.0	7.7	91.7	8.3	0.0	0.0	35.0
Local area networks	45.0	22.2	77.8	11.1	11.1	5.0	50.0
Wide area networks	40.0	12.5	85.7	0.0	14.3	5.0	55.0
Electronic data interchange	15.0	33.3	100.0	0.0	0.0	10.0	75.0
Mobile data communications	10.0	0.0	100.0	0,0	0.0	0.0	90.0
Satellite data distribution	15.0	33.3	100.0	0.0	0.0	5.0	80.0
Human resource management systems	40.0	12.5	100.0	0.0	0.0	10.0	50.0
Computerized order entry	65.0	38,5	100.0	0.0	0.0	10.0	25.0
Computerized inventory control	85.0	35.3	100.0	0.0	0.0	15.0	0.0
Expert systems for decision support tool	0.0	•			•	5.0	95.0
Computerized financial systems	85.0	23.5	93.8	6.3	0.0	0.0	15.0
Electronic scanning systems	15.0	66.7	100.0	0.0	0.0	0.0	85.0
Computer assisted education and training	25.0	0.0	100.0	0.0	0,0	5.0	70.0
Electronic funds transfer	5.0	0.0	100.0	0.0	0.0	5.0	90.0
Automatic teller machines		•					•
Transportation systems	15.0	0.0	100.0	0.0	0.0	5.0	80.0
Computer reservation systems	0.0					5.0	95.0
Automated storage and retrieval systems	15.0	0.0	100.0	0.0	0.0	0.0	85.0
Point of sale terminals	20.0	25.0	100.0	0.0	0.0	. 0.0	80.0
Smart cards	•				•		
Computer-aided design (CAD)	0.0	•	•			5.0	95.0
Computer-aided engineering (CASE)	0.0	•				0.0	100.0
Computer-aided software engineering (CASE)	5.0	0.0	100.0	0.0	0.0	5.0	90.0
In-room management systems		•					
In-room video systems							
In-room check out systems					,		•
Property management systems	5.0	0.0				0.0	95.0

TECHNOLOGY USE Wholesale Petroleum Products

<u>.</u>	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%	*	*	*	*
Personal computers	91.7	54.5	, 90.9	4.5	4.5	4.2	4.2
Online terminals	83.3	30.0	100.0	0.0	0.0	4.2	12.5
Mainframe computer	62.5	40.0	93.3	6.7	0.0	0.0	37.5
Mini-computer	54.2	38.5	83.3	16.7	0.0	4.2	41.7
Electronic mail - private	45.8	36.4	72.7	27.3	0.0	16.7	37.5
Electronic mail - public	4.2	100.0	100.0	0.0	0.0	20.8	75.0
Voice mail	8.3	100.0	100.0	0.0	0.0	8.3	83.3
Video conferencing	0.0			•	•	8.3	91.7
Facsimile	79.2	36.8	88.9	0.0	11.1	4.2	16.7
Desktop publishing	37.5	55.6	75.0	25.0	0.0	12.5	50.0
External databases	41.7	30.0	90.0	10.0	0.0	4.2	54.2
Telex	58.3	21.4	85.7	14.3	0.0	0.0	41.7
Local area networks	37.5	55.6	77.8	11.1	11.1	16.7	45.8
Wide area networks	50.0	33.3	91.7	8.3	0.0	16.7	33.3
Electronic data interchange	20.8	60.0	50.0	50.0	0.0	25.0	54.2
Mobile data communications	25.0	50.0	100.0	0.0	0.0	8.3	66.7
Satellite data distribution	4.2	0.0	100.0	0.0	. 0.0	4.2	91.7
Human resource management systems	37.5	33,3	88.9	11.1	0.0	33.3	29.2
Computerized order entry	62.5	40.0	80.0	13.3	6.7	8.3	29.2
Computerized inventory control	66.7	37.5	75.0	25.0	0.0	16.7	16.7
Expert systems for decision support tool	20.8	60.0	75.0	25.0	0.0	4.2	75.0
Computerized financial systems	87.5	28.6	89.5	10.5	0.0	0.0	12.5
Electronic scanning systems	29.2	42.9	83.3	16.7	0.0	16.7	54.2
Computer assisted education and training	37.5	22.2	75.0	25.0	0.0	8.3	54.2
Electronic funds transfer	29.2	42.9	100.0	0.0	0.0	4.2	66.7
Automatic teller machines							•
Transportation systems	20.8	80.0	80.0	20.0	0.0	16.7	62.5
Computer reservation systems	4.2	0.0	100.0	0.0	0.0	4.2	91.7
Automated storage and retrieval systems	16.7	75.0	100.0	0.0	0.0	4.2	79.2
Point of sale terminals	33.3	37.5	100.0	0.0	0.0	12.5	54.2
Smart cards		,				•	
Computer-aided design (CAD)	29.2	42.9	66.7	33.3	0.0	4.2	66.7
Computer-aided engineering (CASE)	12.5	100.0	66.7	33.3	0.0	8.3	79.2
Computer-aided software engineering (CASE)	16.7	50.0	75.0	25.0	0.0	4.2	79.2
In-room management systems							•
In-room video systems						•	
In-room check out systems		•					
Property management systems	8.3	100.0	100.0	0.0	0.0	0.0	91.7

TECHNOLOGY USE Wholesale Food Products

	CURRENTLY USED IN OPERATIONS	USED IN INCREASE IN	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	*	%	%	*	*
Personal computers	91.0	55.6	, 92.4	1.3	6.3	3.4	5.6
Online terminals	83.1	41.9	93.0	1.4	5.6	5.6	11.2
Mainframe computer	47.2	31.0	92.9	2.4	4.8	3.4	49.4
Mini-computer	66.3	44.1	85.5	3.6	10.9	0.0	33.7
Electronic mail - private	16.9	26.7	92.3	0.0	7.7	16.9	66.3
Electronic mail - public	12.4	45.5	72.7	18.2	9.1	11.2	76.4
Voice mail	3.4	66.7	66.7	0.0	33.3	9.0	87.6
Video conferencing	2.2	0.0	100.0	0.0	0.0	3.4	94.4
Facsimile	92.1	30.5	78.2	1.3	20.5	1.1	6.7
Desktop publishing	29.2	61.5	79.2	8.3	12.5	14.6	56.2
External databases	11.2	30.0	87.5	12.5	0.0	9.0	79.8
Telex	40.4	11.1	80.6	19.4	0.0	0.0	59.6
Local area networks	37.1	36.4	96.7	3.3	0.0	19.1	43.8
Wide area networks	25.8	26.1	95,2	4.8	0.0	12.4	61.8
Electronic data interchange	24.7	50.0	90.0	5.0	5.0	24.7	50.6
Mobile data communications	14.6	30.8	91.7	0.0	8.3	6.7	78.7
Satellite data distribution	0.0					2.2	97.8
Human resource management systems	37.1	36.4	87.9	12.1	0.0	12.4	50.6
Computerized order entry	88.8	30,4	89.2	2.7	8.1	5.6	5.6
Computerized inventory control	85.4	28.9	91.4	4.3	4.3	7.9	6.7
Expert systems for decision support tool	12.4	9.1	100.0	0.0	0.0	15.7	71.9
Computerized financial systems	92.1	28.0	95.9	2.7	1.4	2.2	5.6
Electronic scanning systems	29.2	46.2	91.7	4.2	4.2	15.7	55.1
Computer assisted education and training	20.2	27.8	94.4	0.0	5.6	10.1	69.7
Electronic funds transfer	14.6	38.5	91.7	8.3	0.0	6.7	78.7
Automatic teller machines		•					
Transportation systems	21.3	10.5	94.4	0.0	5.6	13.5	65.2
Computer reservation systems	3.4	0.0	100.0	0.0	0.0	0.0	96.6
Automated storage and retrieval systems	9.0	12.5	87.5	0.0	12.5	4.5	86.5
Point of sale terminals	19.1	35.3	88.2	· 0.0	11.8	10.1	70.8
Smart cards							•
Computer-aided design (CAD)	10.1	33.3	88.9	0.0	11.1	3.4	86.5
Computer-aided engineering (CASE)	2.2	0.0	100.0	0.0	0.0	4.5	93.3
Computer-aided software engineering (CASE)	0.0					11.2	88.8
In-room management systems							
In-room video systems							
In-room check out systems							
Property management systems	5.6	40.0	100.0	0.0	0.0	3.4	91.0

TECHNOLOGY USE Wholesale Apparel Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	%	*	%	%	*
Personal computers	66.7	37.5	, 87.5	0.0	12.5	8.3	25.0
Online terminals	58.3	28.6	100.0	0.0	0.0	0.0	41.7
Mainframe computer	58.3	28.6	100.0	0.0	0.0	0.0	41.7
Mini-computer	33.3	25.0	100.0	0.0	0.0	0.0	66.7
Electronic mail - private	8.3	0.0	100.0	0.0	0.0	8.3	83.3
Electronic mail - public	0.0			•	•	8.3	91.7
Voice mail	0.0	•			•	0.0	100.0
Video conferencing	8.3	100.0	100.0	0.0	0.0	0.0	91.7
Facsimile	91.7	27.3	81.8	0.0	18.2	0.0	8.3
Desktop publishing	0.0	•	•	•	•	25.0	75.0
External databases	0.0	•		•		16.7	83.3
Telex	58,3	0.0	85.7	14.3	0.0	0,0	41.7
Local area networks	8.3	0.0	100.0	0.0	0.0	0.0	91.7
Wide area networks	8.3	0.0	100.0	0.0	0.0	8.3	83.3
Electronic data interchange	8.3	0.0	100.0	0.0	0.0	25.0	66.7
Mobile data communications	8.3	0.0	100.0	0.0	0.0	25.0	66.7
Satellite data distribution	0.0			•	•	8.3	91.7
Human resource management systems	8.3	0.0	100.0	0.0	0.0	8.3	83.3
Computerized order entry	83.3	40.0	100.0	0.0	0.0	8.3	8.3
Computerized inventory control	91.7	27.3	90.9	9.1	0.0	0.0	8.3
Expert systems for decision support tool	33.3	25.0	100.0	0.0	0.0	8.3	58.3
Computerized financial systems	75.0	11.1	88.9	11.1	0.0	0.0	25.0
Electronic scanning systems	0.0					25.0	75.0
Computer assisted education and training	0.0	•				0.0	100.0
Electronic funds transfer	16.7	100.0	50.0	50.0	0.0	0.0	83.3
Automatic teller machines		•			•	•	
Transportation systems	16.7	0.0	100.0	0.0	0.0	0.0	83.3
Computer reservation systems	0.0	•				0.0	100.0
Automated storage and retrieval systems	0.0	•		•		0.0	100.0
Point of sale terminals	8.3	100.0	100.0	0.0	0.0	16.7	75.0
Smart cards	•	•		•		•	
Computer-aided design (CAD)	8.3	0.0	0.0	100.0	0.0	16.7	75.0
Computer-aided engineering (CASE)	0.0	•		•		0.0	100.0
Computer-aided software engineering (CASE)	0,0	•	,			0.0	100.0
In-room management systems		•				•	•
In-room video systems							•
In-room check out systems	•						
Property management systems	0.0					0.0	100.0

TECHNOLOGY USE Wholesale Household Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	*	%	· %	%	*	*
Personal computers	85.7	41.7	, 83.3	16.7	0.0	0.0	14.3
Online terminals	64.3	33.3	100.0	0.0	0.0	0.0	35.7
Mainframe computer	35.7	20.0	80.0	20.0	0.0	0.0	64.3
Mini-computer	57.1	25.0	100.0	0.0	0.0	0.0	42.9
Electronic mail - private	42.9	0.0	83.3	16.7	0.0	14.3	42.9
Electronic mail - public	7.1	100.0	100.0	0.0	0.0	7.1	85.7
Voice mail	14.3	0.0	100.0	0.0	0.0	0.0	85.7
Video conferencing	0.0	•	•	•	•	0.0	100.0
Facsimile	100.0	28.6	92.9	0.0	7.1	0.0	0.0
Desktop publishing	21.4	66.7	66.7	33.3	0.0	14.3	64.3
External databases	21.4	33.3	100.0	0.0	0.0	14.3	64.3
Telex	57.1	12.5	87.5	12.5	0.0	0.0	42.9
Local area networks	42.9	33.3	100.0	0.0	0.0	14.3	42.9
Wide area networks	42.9	16.7	100.0	0.0	0.0	7.1	50.0
Electronic data interchange	14.3	100.0	100.0	0.0	0.0	28.6	57.1
Mobile data communications	0.0					7.1	92.9
Satellite data distribution	0.0	•	,			7.1	92.9
Human resource management systems	14.3	50.0	100.0	0.0	0.0	14.3	71.4
Computerized order entry	100.0	21.4	100.0	0.0	0.0	0.0	0.0
Computerized inventory control	100.0	21.4	100.0	0.0	0.0	0.0	0.0
Expert systems for decision support tool	0.0			•	•	14.3	85.7
Computerized financial systems	92.9	23.1	100.0	0.0	0.0	0.0	7.1
Electronic scanning systems	7.1	0.0	100.0	0.0	0.0	21.4	71.4
Computer assisted education and training	21.4	0.0	100.0	0.0	0.0	7.1	71.4
Electronic funds transfer	14.3	0.0	100.0	0.0	0.0	7.1	78.6
Automatic teller machines	•	•		•		•	
Transportation systems	7.1	0.0	100.0	0.0	0.0	21.4	71.4
Computer reservation systems	7.1	0.0	100.0	0.0	0.0	0.0	92.9
Automated storage and retrieval systems	0.0					21.4	78.6
Point of sale terminals	28.6	50.0	100.0	0.0	0.0	7.1	64.3
Smart cards	•					•	•
Computer-aided design (CAD)	0.0		•			21.4	78.6
Computer-aided engineering (CASE)	0.0					14.3	85.7
Computer-aided software engineering (CASE)	0.0					21.4	78.6
In-room management systems		,					
In-room video systems							•
In-room check out systems						•	
Property management systems	0.0					7.1	92.9

TECHNOLOGY USE Wholesale Vehicle Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	*	%	*	*	*
Personal computers	89.0	52.3	, 85.9	4.7	9.4	5.5	5.5
Online terminals	89.0	47.7	78.5	7.7	13.8	0.0	11.0
Mainframe computer	50.7	43.2	91.7	2.8	5.6	2.7	46.6
Mini-computer	65.8	37.5	83.0	6.4	10.6	0.0	34.2
Electronic mail - private	37.0	48.1	76.9	11.5	11.5	6.8	56.2
Electronic mail - public	11.0	37.5	37.5	50.0	12.5	8.2	80.8
Voice mail	2.7	50.0	100.0	0.0	0.0	0.0	97.3
Video conferencing	0.0			•	•	4.1	95.9
Facsimile	93.2	36.8	85.3	1.5	13.2	0.0	6.8
Desktop publishing	34.2	56.0	80.0	12.0	8.0	15.1	50.7
External databases	8.2	50.0	83.3	16.7	0.0	9.6	82.2
Telex ·	52.1	10.5	70.3	29.7	0.0	0.0	47.9
Local area networks	45.2	27.3	87.5	9.4	3.1	12.3	42.5
Wide area networks	45.2	39.4	87.9	12.1	0.0	4.1	50.7
Electronic data interchange	37.0	55.6	88.0	12.0	0.0	15.1	47.9
Mobile data communications	15.1	36.4	100.0	0.0	0.0	5.5	79.5
Satellite data distribution	5.5	25.0	100.0	0.0	0.0	4,1	90.4
Human resource management systems	31.5	39.1	82.6	17.4	0.0	12.3	56.2
Computerized order entry	89.0	32.3	80.3	8.2	11.5	4.1	6.8
Computerized inventory control	91.8	26.9	87.1	4.8	8.1	4.1	4.1
Expert systems for decision support tool	9.6	28.6	57.1	0.0	42.9	13.7	76.7
Computerized financial systems	91.8	29.9	87.3	9.5	3.2	1.4	6.8
Electronic scanning systems	4.1	33.3	100.0	0.0	0.0	17.8	78.1
Computer assisted education and training	20.5	33.3	84.6	15.4	0.0	12.3	67.1
Electronic funds transfer	20.5	26.7	83.3	16.7	0.0	8.2	71.2
Automatic teller machines				•	•	•	
Transportation systems	11.0	37.5	83.3	16.7	0.0	2.7	86.3
Computer reservation systems	1.4	100.0	0.0	100.0	0.0	1.4	97.3
Automated storage and retrieval systems	17.8	30.8	91.7	8.3	0.0	4.1	78.1
Point of sale terminals	20.5	20.0	92.9	0.0	7.1	2.7	76.7
Smart cards	•					•	•
Computer-aided design (CAD)	11.0	25.0	87.5	12.5	0.0	5.5	83.6
Computer-aided engineering (CASE)	6.8	40.0	80.0	20.0	0.0	4.1	89.0
Computer-aided software engineering (CASE)	5.5	25.0	100.0	0.0	0.0	9.6	84.9
In-room management systems							
In-room video systems				•	•		•
In-room check out systems							•
Property management systems	4.1	0.0	100.0	0.0	0.0	2.7	93.2

TECHNOLOGY USE Wholesale Hardware Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	%	%	*	*	*
Personal computers	90.5	55.2	, 85.6	3.8	10.6	4.3	5.2
Online terminals	82.8	46.9	91.6	1.1	7.4	5.2	12.1
Mainframe computer	40.5	23.4	91.3	4.3	4.3	2.6	56.9
Mini-computer	58.6	48.5	79.1	9.0	11.9	4.3	37.1
Electronic mail - private	29.3	41.2	85.3	8.8	5.9	12.1	58.6
Electronic mail - public	10.3	58.3	83.3	8.3	8.3	7.8	81.9
Voice mail	0.0	•	•	•	•	5.2	94.8
Video conferencing	0.9	0.0	100.0	0.0	0.0	2.6	96.6
Facsimile	99.1	32.2	80.5	0.0	19.5	0.0	0.9
Desktop publishing	23.3	63.0	76.9	11.5	11.5	19.0	57.8
External databases	20.7	33.3	100.0	0.0	0.0	7.8	71.6
Telex	36.2	4.8	82.5	15.0	2.5	0.0	63.8
Local area networks	37.1	37.2	85.7	4.8	9.5	12.9	50.0
Wide area networks	36.2	26.2	87.8	4.9	7.3	8.6	55.2
Electronic data interchange	23.3	44.4	84.6	11.5	3.8	21.6	55.2
Mobile data communications	12,9	46.7	86.7	6.7	6.7	7.8	79.3
Satellite data distribution	4.3	20.0	80.0	0.0	20.0	2.6	93.1
Human resource management systems	22.4	23.1	88.0	8.0	4.0	15.5	62.1
Computerized order entry	77.6	41.1	88.4	3.5	8.1	6.9	15.5
Computerized inventory control	77.6	37.8	88.4	4.7	7.0	10.3	12.1
Expert systems for decision support tool	20.7	33.3	95.5	0.0	4.5	8.6	70.7
Computerized financial systems	92.2	29.9	92.2	4.9	2.9	3.4	4.3
Electronic scanning systems	8.6	40.0	87.5	0.0	12.5	22.4	69.0
Computer assisted education and training	15.5	44.4	81.3	6.3	12.5	11.2	73.3
Electronic funds transfer	17.2	35.0	88.9	0.0	11.1	8.6	74.1
Automatic teller machines		•				•	
Transportation systems	11.2	15.4	63.6	27.3	9.1	6.0	82.8
Computer reservation systems	2.6	66.7	100.0	0.0	0.0	1.7	95.7
Automated storage and retrieval systems	5.2	16.7	100.0	0.0	0.0	3.4	91.4
Point of sale terminals	26.7	48.4	86.7	10.0	3.3	10.3	62.9
Smart cards	•		,			•	•
Computer-aided design (CAD)	17.2	35.0	85.0	10.0	5.0	5.2	77.6
Computer-aided engineering (CASE)	7.8	22.2	88.9	11.1	0.0	1.7	90.5
Computer-aided software engineering (CASE)	6.9	0.0	85.7	0.0	14.3	6.0	87.1
In-room management systems		•					
In-room video systems							
In-room check out systems	•				•		
Property management systems	4.3	60.0	50.0	25.0	25.0	1.7	94.0

TECHNOLOGY USE Wholesale Machinery Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	%	%	%	*	%
Personal computers	95.7	47.8	, 88.5	4.0	7.5	1.4	2.9
Online terminals	88.6	42.5	87.0	5.4	7.6	2.9	8.6
Mainframe computer	41.4	23.0	83.5	10.6	5.9	1.9	56.7
Mini-computer	62.4	38.2	83.2	10.4	6.4	4.3	33.3
Electronic mail - private	38.1	35.0	71.4	13.0	15.6	11.9	50.0
Electronic mail - public	14.3	46.7	83.3	16.7	0.0	6.2	79.5
Voice mail	9.5	40.0	95.0	0.0	5.0	5.7	84.8
Video conferencing	2.9	50.0	100.0	0.0	0.0	6.7	90.5
Facsimile	97.6	33.2	84.3	1.5	14.2	1.0	1.4
Desktop publishing	36.2	42.1	77.0	8.1	14.9	15.2	48.6
External databases	19.0	40.0	79,5	15.4	5.1	9.0	71.9
Telex	48.6	7.8	82.0	17.0	1.0	0.0	51.4
Local area networks	46.7	40.8	83.0	8.5	8.5	17.1	36.2
Wide area networks	34.3	36.1	92.8	4.3	2.9	8.6	57.1
Electronic data interchange	26.7	55.4	79.2	17.0	3.8	22.9	50.5
Mobile data communications	11.9	64.0	70.8	12.5	16.7	7.1	81.0
Satellite data distribution	4.8	30.0	80.0	10.0	10.0	8.1	87.1
Human resource management systems	30.0	27.0	88.7	8.1	3.2	17.6	52.4
Computerized order entry	87.6	25.0	86.7	8.3	5.0	5.2	7.1
Computerized inventory control	88.1	25.9	85.6	8.8	5.5	5.2	6.7
Expert systems for decision support tool	15.2	28.1	87.5	6.3	6.3	8.6	76.2
Computerized financial systems	91.9	20.2	88.7	7.5	3.8	3,3	4.8
Electronic scanning systems	11,4	37.5	79.2	16.7	4.2	18.6	70.0
Computer assisted education and training	25.7	40.7	84.6	7.7	7.7	11.4	62.9
Electronic funds transfer	15.7	27.3	90.3	0.0	9.7	9.0	75.2
Automatic teller machines	•						
Transportation systems	9.5	25.0	94.4	0.0	5.6	1.9	88.6
Computer reservation systems	2,9	33.3	100.0	0.0	0.0	1.0	96.2
Automated storage and retrieval systems	11.0	39.1	81.0	4.8	14.3	6.2	82.9
Point of sale terminals	14.3	40.0	93.1	3.4	3.4	8.6	77.1
Smart cards	•	,			,		
Computer-aided design (CAD)	20.0	33.3	77.5	10.0	12.5	4.3	75.7
Computer-aided engineering (CASE)	9.5	35.0	84.2	10.5	5.3	3.3	87.1
Computer-aided software engineering (CASE)		43.5	86.4	4.5	9.1	7.1	81.9
In-room management systems	•		,	•		•	
In-room video systems						•	
In-room check out systems							
Property management systems	2.4	40.0	100.0	0.0	0.0	2.4	95.2

TECHNOLOGY USE Wholesale Other Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	*	*	*	*	%
Personal computers	89.4	57.1	, 88.1	7.1	4.8	2.1	8.5
Online terminals	89.4	50.0	91.7	4.8	3.6	1.1	9.6
Mainframe computer	47.9	40.0	82.2	4.4	13.3	0.0	52.1
Mini-computer	61.7	34.5	91.2	7.0	1.8	1.1	37.2
Electronic mail - private	29.8	42.9	89.3	7.1	3.6	12.8	57.4
Electronic mail - public	11.7	45.5	72 .7	27.3	0.0	9.6	78.7
Voice mail	3.2	66.7	100.0	0.0	0.0	8.5	88.3
Video conferencing	1.1	0.0	100.0	0.0	0.0	5.3	93.6
Facsimile	94.7	33.7	84.3	1.1	14.6	1.1	4.3
Desktop publishing	30.9	37.9	85.2	3.7	11.1	18.1	51.1
External databases	14.9	42.9	100.0	0.0	0.0	10.6	74.5
Telex	63.8	10.0	91.2	7.0	1.8	0.0	36.2
Local area networks	33.0	29.0	83.9	12.9	3.2	21.3	45.7
Wide area networks	30.9	31.0	89.3	3.6	7.1	8.5	60.6
Electronic data interchange	20.2	47.4	89.5	5.3	5.3	31.9	47.9
Mobile data communications	5.3	20.0	100.0	0.0	0.0	3.2	91.5
Satellite data distribution	3.2	0.0	66.7	33.3	0.0	5.3	91.5
Human resource management systems	35.1	45.5	87.5	6.3	6.3	16.0	48.9
Computerized order entry	87.2	42.7	87.5	7.5	5.0	6.4	6.4
Computerized inventory control	86.2	39.5	82.3	12.7	5.1	9.6	4.3
Expert systems for decision support tool	13.8	61.5	84.6	0.0	15.4	13.8	72.3
Computerized financial systems	92.6	32.2	92.9	3.5	3.5	4.3	3.2
Electronic scanning systems	22.3	42.9	76.2	4.8	19.0	22.3	55.3
Computer assisted education and training	23.4	45.5	90.9	9.1	0.0	8.5	68.1
Electronic funds transfer	11.7	27.3	100.0	0.0	0.0	11.7	76.6
Automatic teller machines	•					•	
Transportation systems	12.8	41.7	66.7	16.7	16.7	5.3	81.9
Computer reservation systems	1.1	100.0	0.0	0.0	100.0	1.1	97.9
Automated storage and retrieval systems	11.7	27.3	90.9	9.1	0.0	10.6	77.7
Point of sale terminals	16.0	26.7	80.0	0.0	20.0	11.7	72.3
Smart cards						•	•
Computer-aided design (CAD)	8.5	25.0	85.7	14.3	0.0	6.4	85.1
Computer-aided engineering (CASE)	3.2	0.0	66.7	33.3	0.0	3.2	93.6
Computer-aided software engineering (CASE)	3.2	33.3	100.0	0.0	0.0	9.6	87.2
In-room management systems							•
In-room video systems							
In-room check out systems							
Property management systems	6.4	16.7	100.0	0.0	0.0	0.0	93.6

TECHNOLOGY USE Retail Food Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	%	*	*	*	*
Personal computers	76.9	58.0	, 85.9	7.1	7.1	6.2	16.9
Online terminals	53.8	44.3	91.3	4.3	4.3	5.4	40.8
Mainframe computer	28.5	37.8	94.4	5.6	0.0	2.3	69.2
Mini-computer	50.0	33,8	92.2	4.7	3.1	4.6	45.4
Electronic mail - private	19.2	44.0	84.0	8.0	8.0	7.7	73.1
Electronic mail - public	4.6	83.3	100.0	0.0	0.0	7.7	87.7
Voice mail	3.1	25.0	100.0	0.0	0.0	1.5	95.4
Video conferencing	0.8	0.0	100.0	0.0	0.0	1.5	97.7
Facsimile	76.9	39.0	82.7	2.0	15.3	3.8	19.2
Desktop publishing	21.5	60.7	70.4	14.8	14.8	9.2	69.2
External databases	8.5	45.5	63.6	27.3	9.1	9.2	82.3
Telex	13.8	22.2	83.3	16.7	0.0	0.0	86.2
Local area networks	26.2	50.0	81.8	12.1	6.1	10.8	63.1
Wide area networks	14.6	57.9	78.9	5.3	15.8	6.2	79.2
Electronic data interchange	18.5	75.0	73.9	21.7	4.3	15.4	66.2
Mobile data communications	7.7	20.0	100.0	0.0	0.0	3.1	89.2
Satellite data distribution	0.0				•	0.8	99.2
Human resource management systems	23.1	36.7	89.7	6.9	3.4	12.3	64.6
Computerized order entry	48.5	36.5	93.5	4,8	1.6	8.5	43.1
Computerized inventory control	48.5	36.5	78.7	18.0	3.3	17.7	33.8
Expert systems for decision support tool	6.9	44.4	88.9	11.1	0.0	6.9	86.2
Computerized financial systems	80.0	33.7	90.7	8.2	1.0	4.6	15.4
Electronic scanning systems	40.8	52.8	86.8	7.5	5.7	11.5	47.7
Computer assisted education and training	10.0	53.8	83.3	8.3	8.3	3.1	86.9
Electronic funds transfer	14.6	36.8	89.5	0.0	10.5	8.5	76.9
Automatic teller machines		•		•	•	•	
Transportation systems	6.2	25.0	100.0	0.0	0.0	1.5	92.3
Computer reservation systems	0.8	0.0	100.0	0.0	0.0	0.0	99.2
Automated storage and retrieval systems	6.9	33.3	77.8	22.2	0.0	0.8	92.3
Point of sale terminals	40,0	51.9	84.0	12.0	4.0	10.8	49.2
Smart cards	•				•		
Computer-aided design (CAD)	6.9	33.3	87.5	12.5	0.0	2.3	90.8
Computer-aided engineering (CASE)	3.1	25.0	66.7	33.3	0.0	0.8	96.2
Computer-aided software engineering (CASE)	2.3	33.3	66.7	33.3	0.0	3.1	94.6
In-room management systems	•						
In-room video systems		•					
In-room check out systems		•			•		
Property management systems	3.1	25.0	50.0	50.0	0.0	4.6	92.3

TECHNOLOGY USE Retail Apparel Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	%	*	*	%	%
Personal computers	88.0	43.2	, 91.6	2.1	6.3	2.8	9.3
Online terminals	66.7	34.7	97.2	1.4	1.4	3.7	29.6
Mainframe computer	42.6	26.1	97.8	2.2	0.0	0.9	56.5
Mini-computer	44.4	41.7	97.9	0.0	2.1	3.7	51.9
Electronic mail - private	15.7	29.4	76.5	23.5	0.0	15.7	68.5
Electronic mail - public	5.6	33.3	83.3	16.7	0.0	7.4	87.0
Voice mail	6.5	57.1	85.7	0.0	14.3	1.9	91.7
Video conferencing	0.0	•			•	0.9	99.1
Facsimile	90.7	29.6	91.8	0.0	8.2	3.7	5.6
Desktop publishing	13.0	28.6	92.9	0.0	7,1	6.5	80.6
External databases	8.3	44.4	100.0	0.0	0.0	6.5	85.2
Telex	25.0	14.8	74.1	14.8	11.1	0.0	75.0
Local area networks	27.8	. 36.7	100.0	0.0	0.0	17.6	54.6
Wide area networks	15.7	35.3	88.2	5.9	5.9	8.3	75.9
Electronic data interchange	10.2	18.2	81.8	18.2	0.0	7.4	82.4
Mobile data communications	1.9	0.0	100.0	0.0	0.0	0.0	98.1
Satellite data distribution	0.9	0.0	100.0	0.0	0.0	0.9	98.1
Human resource management systems	23,1	16.0	84.0	16.0	0.0	13.9	63.0
Computerized order entry	60.2	23.1	95.4	4.6	0.0	8.3	31.5
Computerized inventory control	70.4	30.3	93.2	6.8	0.0	8.3	21.3
Expert systems for decision support tool	11.1	41.7	100.0	0.0	0.0	5,6	83.3
Computerized financial systems	86.1	25.8	94.5	5.5	0.0	3.7	10.2
Electronic scanning systems	19.4	38.1	95.0	5.0	0.0	20.4	60.2
Computer assisted education and training	12.0	38.5	84.6	7.7	7.7	2.8	85.2
Electronic funds transfer	19.4	33,3	100.0	0.0	0.0	5.6	75.0
Automatic teller machines	•			•	•	•	
Transportation systems	4.6	0.0	40.0	40.0	20.0	0.9	94.4
Computer reservation systems	1.9	0.0	100.0	0.0	0.0	0.0	98.1
Automated storage and retrieval systems	3.7	25.0	75.0	0.0	25.0	0.9	95.4
Point of sale terminals	53.7	36.2	85.7	3.6	10.7	18.5	27.8
Smart cards	•	•	•		, ,		
Computer-aided design (CAD)	7.4	0.0	85.7	14.3	0.0	0.9	91.7
Computer-aided engineering (CASE)	0.9	0.0	100.0	0.0	0.0	0.0	99.1
Computer-aided software engineering (CASE)	0.9	0.0	100.0	0.0	0.0	1.9	97.2
In-room management systems	•	•				•	•
In-room video systems	•	•				•	
In-room check out systems	•						•
Property management systems	2.8	0.0	100.0	0.0	0.0	2.8	94.4

TECHNOLOGY USE Retail Furniture Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	*	*	*	*
Personal computers	81.3	50.0	, 76.9	7.7	15.4	3.1	15.6
Online terminals	71.9	60.9	90.9	9,1	0.0	3.1	25.0
Mainframe computer	31.3	40.0	70.0	10.0	20.0	0.0	68.8
Mini-computer	56.3	55.6	88.9	5.6	5.6	3.1	40.6
Electronic mail - private	31.3	50.0	80,0	0.0	20.0	9.4	59.4
Electronic mail - public	6.3	50.0	100.0	0.0	0.0	6,3	87.5
Voice mail	3.1	100.0	0.0	100.0	0.0	6.3	90.6
Video conferencing	0.0				,	6.3	93.8
Facsimile	96.9	38.7	76.7	0.0	23.3	0.0	3.1
Desktop publishing	25.0	50.0	62.5	0.0	37.5	12.5	62.5
External databases	6.3	50.0	100.0	0.0	0.0	9.4	84.4
Telex	28.1	0.0	77.8	22.2	0.0	0.0	71.9
Local area networks	46. 9	40.0	93.3	6.7	0.0	9.4	43,8
Wide area networks	25.0	50.0	87.5	0.0	12.5	9,4	65.6
Electronic data interchange	12.5	50.0	66.7	0.0	33.3	18.8	68.8
Mobile data communications	9.4	66.7	100.0	0.0	0.0	3.1	87.5
Satellite data distribution	3.1	100.0	100.0	0.0	0.0	3,1	93.8
Human resource management systems	12.5	75.0	100.0	0.0	0.0	15.6	71.9
Computerized order entry	59.4	47.4	89.5	10.5	0.0	25.0	15.6
Computerized inventory control	75.0	33.3	83.3	12.5	4.2	15.6	9.4
Expert systems for decision support tool	9.4	66.7	100.0	0.0	0.0	6.3	84.4
Computerized financial systems	87.5	39.3	85.7	10.7	3.6	6.3	6.3
Electronic scanning systems	12.5	50.0	75.0	25.0	0.0	12.5	75.0
Computer assisted education and training	18.8	66.7	83.3	16.7	0.0	9.4	71.9
Electronic funds transfer	15.6	60.0	100.0	0.0	0.0	6.3	78.1
Automatic teller machines							•
Transportation systems	6.3	50.0	100.0	0.0	0.0	6.3	87.5
Computer reservation systems	9.4	100.0	100.0	·0.0	0.0	0.0	90.6
Automated storage and retrieval systems	6.3	50.0	100.0	0.0	0.0	9.4	84.4
Point of sale terminals	50.0	25.0	93.3	6.7	0.0	12.5	37.5
Smart cards	•						
Computer-aided design (CAD)	9.4	66.7	100.0	0.0	0.0	6.3	84.4
Computer-aided engineering (CASE)	3.1	100.0	100,0	0.0	0.0	3.1	93.8
Computer-aided software engineering (CASE)	3.1	100.0	100.0	0.0	0.0	3.1	93.8
In-room management systems	,	•	,				•
In-room video systems			,				
In-room check out systems							
Property management systems	3.1	0.0	100.0	0.0	0.0	0.0	96.9

TECHNOLOGY USE Retail Vehicles Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	*	*	*	*	` %	*
Personal computers	84.0	38.2	, 95.4	0.9	3.7	3.8	12.2
Online terminals	80.9	36.8	87.4	7.8	4.9	1.5	17.6
Mainframe computer	56.5	24.3	93.0	2.8	4.2	0.0	43.5
Mini-computer	43.5	31.6	89.3	7.1	3.6	3.8	52.7
Electronic mail - private	32.1	33.3	90.5	2.4	7.1 ·	2.3	65.6
Electronic mail - public	9.9	30.8	100.0	0.0	0.0	1.5	88.5
Voice mail	6.9	55.6	88.9	11.1	0.0	3.1	90.1
Video conferencing	5.3	42.9	100.0	0.0	0.0	3.1	91.6
Facsimile	81.7	29.0	93.2	0.0	6.8	6.1	12.2
Desktop publishing	16.8	36.4	81.8	4.5	13.6	8.4	74.8
External databases	10.7	28.6	100.0	0.0	0.0	7.6	81.7
Telex	9.9	15.4	69.2	30.8	0.0	0.8	89.3
Local area networks	38.2	30.0	96.0	4.0	0.0	11.5	50.4
Wide area networks	32.8	23.3	93.0	4.7	2.3	3.1	64.1
Electronic data interchange	24.4	31.3	93.8	6.3	0.0	6.9	68.7
Mobile data communications	7.6	40.0	100.0	0.0	0.0	2.3	90.1
Satellite data distribution	4.6	66.7	66.7	33.3	0.0	9.2	86.3
Human resource management systems	22.1	31.0	96.6	3.4	0.0	11.5	66.4
Computerized order entry	79.4	17.3	96.0	4.0	0.0	3.1	17.6
Computerized inventory control	88.5	23.3	95.5	3.6	0.9	3.8	7.6
Expert systems for decision support tool	16.8	18.2	85.7	9.5	4.8	6.1	77.1
Computerized financial systems	85.5	14.3	94.3	3.8	1.9	3.1	11.5
Electronic scanning systems	9.9	38.5	100.0	0.0	0.0	14.5	75.6
Computer assisted education and training	17.6	47.8	91.3	8.7	0.0	9.9	72.5
Electronic funds transfer	22.1	34.5	92.6	3.7	3.7	9.2	68.7
Automatic teller machines						•	
Transportation systems	5.3	14.3	100.0	0.0	0.0	0.0	94.7
Computer reservation systems	6.1	37.5	100.0	0.0	0.0	0.8	93.1
Automated storage and retrieval systems	13.0	29.4	88.2	5.9	5.9	2.3	84.7
Point of sale terminals	45.8	30.0	90.0	6.7	3.3	6.9	47.3
Smart cards						•	
Computer-aided design (CAD)	5.3	42.9	71.4	0.0	28.6	0.0	94.7
Computer-aided engineering (CASE)	1.5	50.0	100.0	0.0	0.0	0.0	98.5
Computer-aided software engineering (CASE)	0.8	0.0	100.0	0.0	0.0	1.5	97.7
In-room management systems							
In-room video systems		•					
In-room check out systems		•					
Property management systems	3.8	60.0	80.0	20.0	0.0	3.1	93.1

TECHNOLOGY USE General Retail Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPÉCTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%	%	%	%	%
Personal computers	91.5	44.2	, 93.0	2.3	4.7	4.3	4.3
Online terminals	76.6	41.7	97.1	0.0	2.9	2.1	21.3
Mainframe computer	38.3	27.8	94.4	0.0	5.6	6.4	55.3
Mini-computer	38.3	38.9	77.8	11.1	11.1	6.4	55.3
Electronic mail - private	23.4	45.5	90.9	0.0	9.1	4.3	72.3
Electronic mail - public	6.4	33.3	100.0	0.0	0.0	2.1	91.5
Voice mail	6.4	33.3	100.0	0.0	0.0	2.1	91.5
Video conferencing	2.1	0.0	0.0	0.0	100.0	0.0	97.9
Facsimile	55.3	46.2	80.0	4.0	16.0	21.3	23.4
Desktop publishing	19.1	22.2	77.8	11.1	11.1	14.9	66.0
External databases	14.9	42.9	85.7	0.0	14.3	8.5	76.6
Telex	19.1	11.1	66.7	33.3	0.0	0.0	80.9
Local area networks	31.9	40.0	73.3	13.3	13.3	12.8	55.3
Wide area networks	36.2	41.2	93.8	0.0	6.3	4.3	59.6
Electronic data interchange	10.6	40.0	80.0	20.0	0.0	19.1	70.2
Mobile data communications	10.6	20.0	100.0	0.0	0.0	0.0	89.4
Satellite data distribution	4.3	50.0	50.0	0.0	50.0	6.4	89.4
Human resource management systems	38.3	38.9	94.4	0.0	5.6	4.3	57.4
Computerized order entry	57.4	29.6	96.2	0.0	3.8	8.5	34.0
Computerized inventory control	55.3	42.3	92.3	3.8	3.8	10.6	34.0
Expert systems for decision support tool	8.5	50.0	75.0	25.0	0,0	14.9	76.6
Computerized financial systems	85.1	27.5	92.3	5.1	2.6	2.1	12.8
Electronic scanning systems	38.3	50.0	76.5	11.8	11.8	12.8	48.9
Computer assisted education and training	19.1	55.6	77.8	22.2	0.0	12.8	68.1
Electronic funds transfer	12.8	50.0	66.7	33.3	0.0	12.8	74.5
Automatic teller machines	•	•					
Transportation systems	10.6	60.0	50.0	50.0	0,0	2.1	87.2
Computer reservation systems	4.3	50.0	100.0	0.0	0.0	4.3	91.5
Automated storage and retrieval systems	8.5	50.0	100.0	0.0	0.0	4.3	87.2
Point of sale terminals	59.6	39.3	92.9	0.0	7.1	10.6	29.8
Smart cards	•	•					•
Computer-aided design (CAD)	8.5	50.0	100.0	0.0	0.0	4.3	87.2
Computer-aided engineering (CASE)	2.1	100.0	100.0	0.0	0.0	2.1	95.7
Computer-aided software engineering (CASE)	8.5	75.0	100.0	0.0	0.0	6.4	85.1
In-room management systems					•		
In-room video systems						,•	
In-room check out systems			•				
Property management systems	8.5	50.0	100.0	0.0	0.0	4.3	87.2

TECHNOLOGY USE Other Retail Products

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	* .	%	%	*	*
Personal computers	83.8	45.2	, 85.5	8.1	6.5	5.4	10.8
Online terminals	55.4	58.5	95.1	2.4	2.4	9.5	35.1
Mainframe computer	20.3	40.0	86.7	6.7	6.7	2.7	77.0
Mini-computer	52.7	38.5	94.7	2.6	2.6	6.8	40.5
Electronic mail - private	16.2	50.0	66.7	33.3	0.0	9.5	74.3
Electronic mail - public	4.1	33.3	100.0	0.0	0.0	4.1	91.9
Voice mail	0.0			•	•	2.7	97.3
Video conferencing	0.0	•			•	1.4	98.6
Facsimile	79.7	35.6	86.0	1.8	12.3	6.8	13.5
Desktop publishing	21.6	56.3	80.0	6.7	13.3	12.2	66.2
External databases	8.1	33.3	83.3	16.7	0.0	9.5	82.4
Telex	25.7	10.5	84.2	10.5	5.3	0.0	74.3
Local area networks	35.1	38.5	96.0	0.0	4.0	16.2	48.6
Wide area networks	16.2	16.7	91.7	0.0	8.3	12.2	71.6
Electronic data interchange	6.8	60.0	80.0	20.0	0.0	16.2	77.0
Mobile data communications	6.8	20.0	100.0	0.0	0.0	2.7	90.5
Satellite data distribution	0.0		•	•	•	1.4	98.6
Human resource management systems	20.3	20.0	100.0	0.0	0.0	16.2	63.5
Computerized order entry	58.1	37.2	90.5	9.5	0.0	16.2	25.7
Computerized inventory control	55.4	39.0	90.0	10.0	0.0	18.9	25.7
Expert systems for decision support tool	9.5	57.1	71.4	28.6	0.0	10.8	79.7
Computerized financial systems	79.7	30.5	91.2	3,5	5.3	4.1	16.2
Electronic scanning systems	10.8	37.5	85.7	14.3	0.0	13.5	75.7
Computer assisted education and training	13.5	40.0	77.8	11.1	11.1	9.5	77.0
Electronic funds transfer	14.9	18.2	100.0	0.0	0.0	14.9	70.3
Automatic teller machines	•		•		•	•	
Transportation systems	1.4	100.0	100.0	0.0	0.0	5.4	93.2
Computer reservation systems	0.0					1.4	98.6
Automated storage and retrieval systems	2.7	0,0	100.0	0.0	0.0	5.4	91.9
Point of sale terminals	41.9	25.8	85.2	11.1	3.7	17.6	40.5
Smart cards	•	•			•		
Computer-aided design (CAD)	5.4	50.0	100.0	0.0	0.0	4.1	90.5
Computer-aided engineering (CASE)	1.4	0.0	100.0	0.0	0,0	2.7	95.9
Computer-aided software engineering (CASE)	1.4	100.0	0.0	0.0	100.0	2.7	95.9
In-room management systems		•					
In-room video systems		•					
In-room check out systems		•					
Property management systems	0.0					2.7	97.3

TECHNOLOGY USE Deposit Accepting Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	*	%	*	*	%	%
Personal computers	96.9	79.0	, 83.9	8.1	8.1	3.1	0.0
Online terminals	96.9	54.8	90.3	3.2	6.5	0.0	3.1
Mainframe computer	75.0	43.8	91.5	6.4	2.1	1.6	23.4
Mini-computer	54.7	40.0	77.1	14.3	8.6	9.4	35.9
Electronic mail - private	56.3	63.9	58.3	22.2	19.4	21.9	21.9
Electronic mail - public	17.2	36.4	90.9	9.1	0.0	18.8	64.1
Voice mail	10.9	85.7	71.4	14.3	14.3	10.9	78.1
Video conferencing	4.7	33.3	100.0	0.0	0.0	7.8	87.5
Facsimile	92.2	54.2	89.7	1.7	8.6	3.1	4.7
Desktop publishing	57.8	54.1	91.9	5.4	2.7	15.6	26.6
External databases	43.8	50.0	100.0	0.0	0.0	10.9	45.3
Telex	31.3	20.0	80.0	20.0	0.0	1.6	67.2
Local area networks	56.3	61.1	72.2	22.2	5.6	26.6	17.2
Wide area networks	50.0	62,5	96.8	0.0	3.2	17.2	32.8
Electronic data interchange	25.0	62.5	93.3	6.7	0.0	17.2	57.8
Mobile data communications	7.8	40.0	100.0	0.0	0.0	6.3	85.9
Satellite data distribution	3.1	0.0	100.0	0.0	0.0	6.3	90.6
Human resource management systems	62.5	27.5	86.8	13.2	0.0	12.5	25.0
Computerized order entry	23.4	33.3	100.0	0.0	0.0	9.4	67.2
Computerized inventory control	32.8	23.8	90.0	10.0	0.0	18.8	48.4
Expert systems for decision support tool	4.7	66.7	100.0	0.0	0.0	29.7	65.6
Computerized financial systems	93.8	40.0	94.8	5.2	0.0	1.6	4.7
Electronic scanning systems	12.5	50.0	100.0	0.0	0.0	14.1	73.4
Computer assisted education and training	43.8	50.0	89.3	7.1	3.6	20.3	35.9
Electronic funds transfer	50.0	53.1	93.1	3.4	3.4	17.2	32.8
Automatic teller machines	57.8	43.2	85.3	8.8	5.9	9.4	32.8
Transportation systems	4.7	33.3	100.0	0.0	0.0	3.1	92.2
Computer reservation systems	0.0	•				0.0	100.0
Automated storage and retrieval systems	10.9	42.9	85.7	14.3	0.0	7.8	81.3
Point of sale terminals	7.8	60.0	100.0	0.0	0.0	18.8	73.4
Smart cards	1.6	100.0	100.0	0.0	0.0	15.6	82.8
Computer-aided design (CAD)	7.8	60.0	80.0	20.0	0.0	6.3	85.9
Computer-aided engineering (CASE)	0.0	,		,		1.6	98.4
Computer-aided software engineering (CASE)	9.4	83.3	66.7	33.3	0.0	20.3	70.3
In-room management systems	•	•					
In-room video systems		•	•		•	•	•
In-room check out systems	•						
Property management systems	17.2	36.4	81.8	18.2	0.0	14.1	68.8

TECHNOLOGY USE Consumer & Financing Industries

,	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	*	%	*	*	*
Personal computers	89.5	76.5	, 88.2	5.9	5.9	0.0	10.5
Online terminals	94.7	27.8	94.4	5.6	0.0	0.0	5.3
Mainframe computer	68.4	23.1	91.7	8.3	0.0	0.0	31.6
Mini-computer	57.9	63.6	90.9	9.1	0.0	0.0	42.1
Electronic mail - private	52.6	40.0	100.0	0.0	0.0	21.1	26.3
Electronic mail - public	5.3	100.0	100.0	0,0	0.0	10.5	84.2
Voice mail	10.5	50.0	100.0	0.0	· 0.0	15.8	73.7
Video conferencing	0.0		,			15.8	84.2
Facsimile	94.7	50.0	94.4	0.0	5.6	0.0	5.3
Desktop publishing	36.8	28.6	100.0	0.0	0.0	21.1	42.1
External databases	47.4	55,6	100.0	0.0	0.0	0.0	52.6
Telex	31.6	0.0	83.3	16.7	0.0	0.0	68,4
Local area networks	52.6	60.0	100.0	0.0	0.0	15.8	31.6
Wide area networks	42.1	37.5	100.0	0.0	0.0	15.8	42.1
Electronic data interchange	15.8	0.0	100.0	0.0	0.0	21.1	63.2
Mobile data communications .	5.3	100.0	100.0	0.0	0.0	5.3	89.5
Satellite data distribution	5.3	100.0	100.0	0.0	0.0	0,0	94.7
Human resource management systems	57.9	36.4	100.0	0.0	0.0	15.8	26.3
Computerized order entry	21.1	50.0	100.0	0.0	0.0	5.3	73.7
Computerized inventory control	26.3	40.0	80.0	20,0	0.0	5.3	68.4
Expert systems for decision support tool	10.5	50,0	100.0	0.0	0.0	31.6	57.9
Computerized financial systems	89.5	17.6	87.5	12.5	0.0	0.0	10.5
Electronic scanning systems	21.1	75.0	75.0	25.0	0.0	5.3	73,7
Computer assisted education and training	26.3	20.0	100.0	0.0	0.0	31.6	42.1
Electronic funds transfer	36.8	42.9	100.0	0.0	0.0	10.5	52.6
Automatic teller machines	5.3	100.0	100.0	0.0	0.0	10.5	84.2
Transportation systems	5.3	0.0	100.0	0.0	0.0	0.0	94.7
Computer reservation systems	0.0		,	.		0.0	100.0
Automated storage and retrieval systems	21.1	50.0	100.0	0.0	0.0	0.0	78.9
Point of sale terminals	10.5	100.0	100.0	0.0	0.0	5.3	84.2
Smart cards	0.0					5.3	94.7
Computer-aided design (CAD)	0.0					5.3	94.7
Computer-aided engineering (CASE)	0.0					0.0	100.0
Computer-aided software engineering (CASE)	5.3	100.0	100.0	0.0	0.0	15.8	78.9
In-room management systems							
In-room video systems					- : 	 -	
In-room check out systems					<u> </u>		<u> </u>
Property management systems	5.3	100.0	100.0	0.0	0.0	0.0	94.7

TECHNOLOGY USE Investment Industries

	Currently Used in Operations	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	%	%	*	*
Personal computers	81.8	55.6	, 88.9	5.6	5.6	0.0	18.2
Online terminals	77.3	41.2	100.0	0.0	0.0	0.0	22.7
Mainframe computer	40.9	22.2	87.5	0.0	12.5	0.0	59.1
Mini-computer	50.0	27.3	80.0	10.0	10.0	4.5	45.5
Electronic mail - private	36.4	0.0	100.0	0.0	0.0	9.1	54.5
Electronic mail - public	4.5	0.0	100.0	0.0	0.0	4.5	90.9
Voice mail	4.5	0.0	100.0	0.0	0.0	13.6	81.8
Video conferencing	4.5	0.0	100.0	0.0	0.0	4.5	90.9
Facsimile	90.9	40.0	85.0	0.0	15.0	0.0	9.1
Desktop publishing	31.8	28.6	100.0	0.0	0.0	13.6	54.5
External databases	45.5	20.0	100.0	0.0	0.0	9.1	45.5
Telex	40.9	33.3	88.9	11.1	0.0	0.0	59.1
Local area networks	40.9	33.3	100.0	0.0	0.0	9.1	50.0
Wide area networks	36.4	12.5	75.0	0.0	25.0	9.1	54.5
Electronic data interchange	18.2	50.0	100.0	0.0	0.0	0.0	81.8
Mobile data communications	13.6	33.3	100.0	0.0	0.0	4.5	81.8
Satellite data distribution	0.0	,	•		•	4.5	95.5
Human resource management systems	40.9	0.0	88.9	11.1	0.0	9.1	50.0
Computerized order entry	45.5	10.0	80.0	20,0	0.0	9.1	45.5
Computerized inventory control	45.5	10.0	100.0	0.0	0.0	9.1	45.5
Expert systems for decision support tool	13.6	0.0	100.0	0.0	0.0	4.5	81.8
Computerized financial systems	90.9	25.0	100.0	0.0	0.0	0.0	9.1
Electronic scanning systems	18.2	50.0	100.0	0.0	0.0	13.6	68.2
Computer assisted education and training	22.7	20.0	100.0	0.0	0.0	9.1	68.2
Electronic funds transfer	13.6	0.0	100.0	0.0	0.0	18.2	68.2
Automatic teller machines	0.0					4.5	95.5
Transportation systems	9.1	0.0	100.0	0.0	0.0	0.0	90.9
Computer reservation systems	4.5	0.0	100.0	0.0	0.0	4.5	90.9
Automated storage and retrieval systems	4.5	0.0	100.0	0.0	0.0	4.5	90.9
Point of sale terminals	9.1	50.0	100.0	0.0	0.0	9.1	81.8
Smart cards	0.0					0.0	100.0
Computer-aided design (CAD)	18.2	25.0	100.0	0.0	0.0	0.0	81.8
Computer-aided engineering (CASE)	13.6	0.0	100.0	0.0	0.0	0.0	86.4
Computer-aided software engineering (CASE)	13.6	0.0	66.7	0.0	33.3	4.5	81.8
In-room management systems							
In-room video systems						•	
In-room check out systems							
Property management systems	13.6	0.0	66.7	33.3	0.0	4.5	81.8

TECHNOLOGY USE Insurance Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
•	*	*	*	*	*	%	%
Personal computers	96,9	63.8	, 84.9	3.2	11.8	1.0	2.1
Online terminals	95.9	47.3	93.4	2.2	4.4	1.0	3,1
Mainframe computer	78.4	40.8	90.5	4.1	5.4	1.0	20.6
Mini-computer	44.3	32.6	85.4	7.3	7.3	6.2	49.5
Electronic mail - private	60.8	57.6	77.2	7.0	15.8	14.4	24.7
Electronic mail - public	18.6	27.8	75.0	18.8	6.3	9.3	72.2
Voice mail	10.3	60.0	60.0	20.0	20.0	15.5	74.2
Video conferencing	2.1	0.0	100.0	0.0	0.0	6.2	91.8
Facsimile	95.9	44.1	84.6	4.4	11.0	2.1	2.1
Desktop publishing	52.6	62.7	74.0	16.0	10.0	21.6	25.8
External databases	43.3	50.0	87.8	9.8	2,4	10.3	46.4
Telex	48.5	17.0	86.7	13.3	0.0	0.0	51.5
Local area networks	59.8	60.3	76.4	18.2	5.5	24.7	15.5
Wide area networks	53.6	46.2	94.0	4.0	2.0	14.4	32.0
Electronic data interchange	36.1	45.7	84.4	12.5	3.1	15.5	48.5
Mobile data communications	4.1	75.0	33,3	66.7	0.0	3.1	92.8
Satellite data distribution	5.2	40.0	80.0	20.0	0.0	3.1	91.8
Human resource management systems	58.8	· 24.6	87.3	9.1	3.6	18.6	22.7
Computerized order entry	24.7	25.0	83.3	12.5	4.2	4.1	71.1
Computerized inventory control	37.1	36.1	85.7	14.3	0.0	9.3	53.6
Expert systems for decision support tool	14.4	28.6	85.7	14.3	0.0	35.1	50.5
Computerized financial systems	91.8	31.5	87.2	11.6	1.2	3.1	5.2
Electronic scanning systems	17.5	35.3	80.0	20.0	0.0	14.4	68.0
Computer assisted education and training	41.2	52.5	76.9	20.5	2.6	15.5	43.3
Electronic funds transfer	49.5	50.0	91.5	4.3	4.3	10,3	40.2
Automatic teller machines					•	,	•
Transportation systems	2.1	50.0	100.0	0,0	0.0	1.0	96,9
Computer reservation systems	5.2	20.0	100.0	0.0	0.0	2.1	92.8
Automated storage and retrieval systems	16.5	31.3	73.3	26.7	0.0	5.2	78.4
Point of sale terminals	6.2	100.0	83.3	0.0	16.7	13.4	80.4
Smart cards							
Computer-aided design (CAD)	13.4	23.1	100.0	0.0	0.0	7.2	79.4
Computer-aided engineering (CASE)	3.1	66.7	100.0	0.0	0.0	3.1	93.8
Computer-aided software engineering (CASE)	··	62.5	75.0	18.8	6.3	25.8	57.7
In-room management systems						,	
In-room video systems						•	
In-room check out systems						<u>.</u>	
Property management systems	9.3	33.3	100.0	0.0	0.0	2.1	88.7

TECHNOLOGY USE Other Financial Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	%	*	*	*
Personal computers	100.0	51.7	, 89.7	10.3	0.0	0.0	0.0
Online terminals	86.2	52.0	92.0	8.0	0.0	0.0	13.8
Mainframe computer	27.6	62.5	87.5	12.5	0.0	6.9	65.5
Mini-computer	75.9	40.9	81.8	13.6	4.5	0.0	24.1
Electronic mail - private	24.1	57.1	85.7	0.0	14.3	31.0	44.8
Electronic mail - public	3.4	100.0	100.0	0.0	0.0	17.2	79.3
Voice mail	3.4	100.0	0.0	100.0	0.0	27.6	69.0
Video conferencing	3,4	100.0	100.0	0.0	0.0	17.2	79.3
Facsimile	96.6	35.7	78.6	3.6	17.9	0.0	3.4
Desktop publishing	48.3	50.0	84.6	7.7	7.7	24.1	27.6
External databases	75.9	40.9	86.4	13.6	0.0	0.0	24.1
Telex	72,4	19.0	90.5	4.8	4.8	0.0	27.6
Local area networks	51.7	53.3	100.0	0.0	0.0	20.7	27.6
Wide area networks	41.4	58.3	90.9	9.1	0.0	17.2	41.4
Electronic data interchange	37.9	54.5	72.7	27.3	0.0	6.9	55.2
Mobile data communications	6.9	0.0	100.0	0.0	0.0	3.4	89.7
Satellite data distribution	10.3	66.7	100.0	0.0	0.0	6.9	82.8
Human resource management systems	20.7	16.7	83.3	16.7	0.0	24.1	. 55.2
Computerized order entry	44.8	53.8	83.3	16.7	0.0	6.9	48.3
Computerized inventory control	31.0	88.9	87.5	12.5	0.0	13.8	55.2
Expert systems for decision support tool	10.3	33.3	100.0	0.0	0.0	27.6	62.1
Computerized financial systems	79.3	34.8	81.8	18.2	0.0	10.3	10,3
Electronic scanning systems	3.4	100.0	100.0	0,0	0.0	10.3	86.2
Computer assisted education and training	24.1	42.9	80.0	20.0	0.0	24.1	51.7
Electronic funds transfer	17.2	20.0	100.0	· 0.0	0.0	6.9	75.9
Automatic teller machines						•	•
Transportation systems	0.0		,			0.0	100.0
Computer reservation systems	0.0					0.0	100.0
Automated storage and retrieval systems	0.0					13.8	86.2
Point of sale terminals	3.4	0.0	100.0	0.0	0.0	0.0	96.6
Smart cards							
Computer-aided design (CAD)	3.4	0.0	100.0	0.0	0.0	0.0	96.6
Computer-aided engineering (CASE)	0.0					0.0	100.0
Computer-aided software engineering (CASE)		50,0	100.0	0.0	0.0	13.8	79.3
In-room management systems						,	
In-room video systems	· ·	•					
In-room check out systems	•					•	
Property management systems	0.0	•	•	•		3.4	96.6

TECHNOLOGY USE Real Estate Operators

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	%	%	*	*
Personal computers	90.8	56.5	, 81.2	7.2	11.6	3.9	5.3
Online terminals	84.2	42.2	92.2	7.8	0.0	1.3	14.5
Mainframe computer	34.2	42.3	96.2	3.8	0.0	1.3	64.5
Mini-computer	56.6	44.2	85.4	7.3	7.3	7.9	35.5
Electronic mail - private	31.6	45.8	87.5	4.2	8.3	15.8	52.6
Electronic mail - public	5.3	50.0	75.0	25.0	0,0	9.2	85 .5
Voice mail	0.0	•	,	•	•	10.5	89.5
Video conferencing	1.3	0.0	100.0	0.0	0.0	5.3	93.4
Facsimile	90.8	40.6	84.1	0.0	15.9	1.3	7.9
Desktop publishing	30.3	47.8	85.7	4.8	9.5	22.4	47.4
External databases	23.7	50.0	82.4	11.8	5.9	6.6	69.7
Telex	18.4	7.1	85.7	14.3	0.0	0.0	81.6
Local area networks	44.7	58.8	87.9	6.1	6.1	13.2	42.1
Wide area networks	22.4	41.2	88.2	5.9	5.9	5.3	72.4
Electronic data interchange	10.5	62,5	87.5	0.0	12.5	6.6	82.9
Mobile data communications	11.8	11.1	100.0	0.0	0.0	6.6	81.6
Satellite data distribution	1.3	100.0	100.0	0,0	0.0	2.6	96.1
Human resource management systems	31.6	37.5	87.5	12.5	0.0	17.1	51.3
Computerized order entry	22.4	47.1	88.2	5.9	5.9	10.5	67.1
Computerized inventory control	27.6	42.9	81.0	19.0	0.0	18.4	53.9
Expert systems for decision support tool	14.5	63.6	81.8	9.1	9.1	9.2	76.3
Computerized financial systems	88.2	29.9	89.1	3.1	7.8	2.6	9.2
Electronic scanning systems	2.6	100.0	50.0	50.0	0.0	17.1	80.3
Computer assisted education and training	15.8	25.0	90.9	9.1	0,0	15.8	68.4
Electronic funds transfer	22.4	35.3	93.8	0.0	6,3	7.9	69.7
Automatic teller machines					,	•	. 14
Transportation systems	1.3	100.0	100.0	0.0	0.0	1.3	97.4
Computer reservation systems	13.2	0.0	88.9	0,0	11.1	1.3	85.5
Automated storage and retrieval systems	7.9	33.3	83.3	16.7	0.0	5.3	86.8
Point of sale terminals	9.2	14.3	85.7	14.3	0.0	3.9	86.8
Smart cards		•		,	•	•	•
Computer-aided design (CAD)	17.1	76.9	61.5	0.0	38.5	14.5	68.4
Computer-aided engineering (CASE)	5.3	75.0	75.0	25.0	0.0	9.2	85.5
Computer-aided software engineering (CASE)	1.3	100.0	100.0	0.0	0.0	13.2	85 .5
In-room management systems		•		,	•		•
In-room video systems		•			,		•
In-room check out systems		,					,
Property management systems	59.2	40.0	90.5	4.8	4.8	3.9	36.8

TECHNOLOGY USE Insurance & Real Estate Agents

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	*	*	*	*	%
Personal computers	93.2	58.2	, 83.0	5.7	11.3	0.0	6.8
Online terminals	86,4	51.0	87.8	4.1	8.2	0.0	13.6
Mainframe computer	35.6	52.4	78.9	5.3	15.8	0.0	64.4
Mini-computer	49.2	31.0	82.1	10.7	7.1	3.4	47.5
Electronic mail - private	32.2	31.6	83.3	0.0	16.7	18.6	49.2
Electronic mail - public	6.8	50.0	100.0	0.0	0.0	10.2	83.1
Voice mail	11.9	57.1	66.7	33.3	0.0	10.2	78.0
Video conferencing	0.0		•	•		1.7	98.3
Facsimile	98.3	44.8	78.6	1.8	19.6	0.0	1.7
Desktop publishing	39.0	56.5	71.4	14.3	14.3	16.9	44.1
External databases	35.6	38.1	90.0	5.0	5.0	5.1	59.3
Telex	33.9	20.0	88.9	11.1	0.0	0.0	66.1
Local area networks	42.4	56.0	79.2	8.3	12.5	16.9	40.7
Wide area networks	30.5	50.0	83.3	5.6	11.1	10.2	59.3
Electronic data interchange	20.3	33,3	100.0	0.0	0.0	16.9	62.7
Mobile data communications	5.1	33.3	100.0	0.0	0.0	3.4	91.5
Satellite data distribution	0.0	•				1.7	98.3
Human resource management systems	35.6	38.1	78.9	15.8	5.3	15.3	49.2
Computerized order entry	25.4	26.7	93.3	6.7	0.0	6.8	67.8
Computerized inventory control	28.8	23.5	94.1	0.0	5.9	8.5	62.7
Expert systems for decision support tool	16.9	30.0	90.0	0.0	10.0	10.2	72.9
Computerized financial systems	93.2	27.3	90.4	7.7	1.9	1.7	5.1
Electronic scanning systems	10.2	50.0	83.3	0.0	16.7	3.4	86.4
Computer assisted education and training	25.4	53.3	80.0	6.7	13.3	16.9	57.6
Electronic funds transfer	23.7	50.0	92.9	0.0	7.1	6.8	69.5
Automatic teller machines	•	,					
Transportation systems	0.0	•		,	•	0.0	100.0
Computer reservation systems	1.7	0.0	100.0	0.0	0.0	0.0	98.3
Automated storage and retrieval systems	11.9	28.6	100.0	0.0	0.0	5.1	83.1
Point of sale terminals	3.4	50.0	100.0	0.0	0.0	3.4	93.2
Smart cards	•	•		•			
Computer-aided design (CAD)	1.7	0.0	100.0	0.0	0.0	0.0	98.3
Computer-aided engineering (CASE)	0.0	•	•		•	0.0	100.0
Computer-aided software engineering (CASE)	3.4	50.0	50.0	50.0	0.0	5.1	91.5
In-room management systems	•						•
In-room video systems					•		•
In-room check out systems							
Property management systems	22.0	15.4	92.3	0.0	7.7	3.4	74.6

TECHNOLOGY USE Business Services Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	%	%	%	* .	%
Personal computers	92.5	62.4	, 87.4	2.6	10.0	1.9	5.7
Online terminals	71.2	48.9	90.4	4.6	5.0	6.2	22.6
Mainframe computer	35.3	38.2	88.4	3.1	8.5	2.4	62.3
Mini-computer	58.8	39.4	86.4	5.6	8.0	4.3	36.9
Electronic mail - private	31.3	42.2	80.7	9.6	9.6	19.1	49.6
Electronic mail - public	14.6	48.1	77.4	20.8	1.9	13.2	72.2
Voice mail	7.3	74.1	80.8	11.5	7.7	11.6	81.1
Video conferencing	3.5	46.2	83.3	8.3	8.3	8.1	88.4
Facsimile	89.5	43.4	84.6	1.5	13.9	2.4	8.1
Desktop publishing	36.9	56.2	77.0	11.1	11.9	15.6	47.4
External databases	38.3	52.1	84.9	10.8	4.3	6.7	55.0
Telex	39.4	15.1	80.0	19.3	0.7	0.8	59.8
Local area networks	51.2	48.4	87.2	8.0	4.8	16.4	32.3
Wide area networks	29.9	37.8	92.6	1.9	5.6	12,9	57.1
Electronic data interchange	18.9	50.0	87.0	8.7	4.3	13.5	67.7
Mobile data communications	8.4	45.2	93.5	0.0	6.5	6.2	85.4
Satellite data distribution	2.7	70.0	80.0	20.0	0.0	5.4	91.9
Human resource management systems	38.5	46.2	85.5	9.4	5.1	18.1	43.4
Computerized order entry	26.4	40.8	93.8	4.1	2.1	9.4	64.2
Computerized inventory control	28.3	41.9	81.7	15.4	2.9	10.0	61.7
Expert systems for decision support tool	12.7	38.3	83.0	12.8	4.3	18.1	69.3
Computerized financial systems	89.5	40.1	88.6	6.8	4.6	3.8	6.7
Electronic scanning systems	13.7	45.1	74.0	20.0	6.0	14.3	72.0
Computer assisted education and training	27.5	52.9	90.8	5.1	4.1	13.2	59.3
Electronic funds transfer	15.4	33.3	98.1	0.0	1.9	7.0	77.6
Automatic teller machines	•	•			•	•	•
Transportation systems	5.4	40.0	94.7	0.0	5.3	3.2	91.4
Computer reservation systems	3.2	33,3	100.0	0.0	0,0	2.2	94.6
Automated storage and retrieval systems	10.5	41.0	81.6	10.5	7.9	3.8	85.7
Point of sale terminals	2.2	50.0	87.5	0.0	12.5	3,2	94.6
Smart cards	•					•	•
Computer-aided design (CAD)	22.6	53.6	85.7	4.8	9.5	2.4	74.9
Computer-aided engineering (CASE)	14.0	65.4	90.0	4.0	6.0	3.0	83.0
Computer-aided software engineering (CASE)	11.9	70.5	82.9	12.2	4.9	8.9	79.2
In-room management systems	•	,			,	•	
In-room video systems		•			•		•
In-room check out systems							
Property management systems	4.3	37.5	100.0	0.0	0.0	2.7	93.0

TECHNOLOGY USE Accommodation Service Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	%	*	*	%	%
Personal computers	79.9	51.1	, 79.1	11.5	9.4	7.5	12.6
Online terminals	66.1	35.7	88.4	6.3	5.4	4.6	29.3
Mainframe computer	31.0	22.2	80.8	7.7	11.5	2.9	66.1
Mini-computer	44.8	29.5	86.8	5.3	7.9	5.2	50.0
Electronic mail - private	14.9	30.8	95.7	4.3	0.0	8.0	77.0
Electronic mail - public*	3.4	16.7	100.0	0.0	0.0	5.7	90.8
Voice mail	2.9	60.0	100.0	0.0	0.0	5.2	92.0
Video conferencing	0.0	•			•	4.0	96.0
Facsimile	89.7	23.7	81.7	2.0	16.3	4.6	5.7
Desktop publishing	21.8	39.5	88.6	8.6	2.9	13.2	64.9
External databases	9.8	11.8	94.1	5.9	0.0	5.7	84.5
Telex	50.6	10.2	90.7	8.1	1.2	0.0	49.4
Local area networks	29.9	30.8	88.2	9.8	2.0	12.6	57.5
Wide area networks	14.9	23.1	88.0	4.0	8.0	9.2	75.9
Electronic data interchange	9.2	25.0	100.0	0.0	0.0	5.2	85.6
Mobile data communications	8.6	33,3	84.6	0.0	15.4	0.6	90.8
Satellite data distribution	3.4	16.7	83.3	16.7	0.0	1.7	94.8
Human resource management systems	20.7	25.0	94.3	5.7	0,0	17.2	62.1
Computerized order entry	23.6	22.0	89.7	10.3	0.0	12.1	64.4
Computerized inventory control	43.1	28.0	80.6	19.4	0.0	16.7	40.2
Expert systems for decision support tool	10.3	22.2	76.5	11.8	11.8	5.2	84.5
Computerized financial systems	76.4	19.5	88.9	4.8	6.3	9.2	14.4
Electronic scanning systems	2.3	25.0	100.0	0,0	0.0	2.9	94.8
Computer assisted education and training	16.7	27.6	88.9	7.4	3.7	9.2	74.1
Electronic funds transfer	8.6	40.0	100.0	0.0	0.0	8.6	82.8
Automatic teller machines							
Transportation systems	2.3	0.0	100.0	0.0	0.0	0.6	97.1
Computer reservation systems	66.1	30.4	84.4	7.3	8.3	9.8	24.1
Automated storage and retrieval systems	9.2	6.3	93.8	6.3	0,0	3.4	87.4
Point of sale terminals	50.6	31.8	87.7	9.9	2.5	6.9	42.5
Smart cards							
Computer-aided design (CAD)	4.6	12.5	100.0	0.0	0.0	2.3	93.1
Computer-aided engineering (CASE)	2.3	0.0	100.0	0.0	0.0	1.1	96.6
Computer-aided software engineering (CASE)	5.2	11.1	100.0	0.0	0.0	1.7	93.1
In-room management systems	26.4	28.3	90.7	7.0	2.3	12.6	60.9
In-room video systems	39.7	17.4	90.8	6.2	3.1	8.0	52.3
In-room check out systems	14.9	23.1	83.3	12.5	4.2	18.4	66.7
Property management systems	33.3	36.2	89.3	_1.8	8.9	10.3	56.3

TECHNOLOGY USE Food & Beverage Service Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO INCREASE IN NEXT 3 YRS.	EXPECTATIONS MET	EXPECTATIONS NOT MET	EXPECTATIONS EXCEEDED	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	%	*	%	%	*
Personal computers	80.2	48.7	, 88.2	3.3	8.5	6.3	13.5
Online terminals	40.1	42.9	94.7	1.3	3.9	6.8	53.1
Mainframe computer	16.7	34.4	90.6	6.3	3.1	3.6	79.7
Mini-computer	35.9	34.8	87.0	8.7	4.3	3.1	60.9
Electronic mail - private	8.3	50.0	81.3	12.5	6.3	8.9	82.8
Electronic mail - public	2.1	25.0	75.0	0.0	25.0	4.7	93.2
Voice mail	3.6	14.3	85.7	14.3	0.0	1.0	95.3
Video conferencing	0.5	0.0	100.0	0.0	0.0	2.1	97.4
Facsimile	64.6	33.9	86.2	0.8	13.0	9.4	26.0
Desktop publishing	14.6	57.1	77.8	11.1	11.1	10.4	75.0
External databases	9.4	38.9	72.2	22.2	5.6	4.2	86.5
Telex	10.9	9.5	90.0	10.0	0.0	0.5	88.5
Local area networks	18.8	30.6	97.0	0.0	3.0	15.6	65.6
Wide area networks	10.9	52.4	100.0	0.0	0.0	8,9	80.2
Electronic data interchange	8.3	31.3	81.3	6.3	12.5	7.8	83.9
Mobile data communications	3.6	57.1	100.0	0.0	0.0	0.5	95.8
Satellite data distribution	0.0				•	1.0	99.0
Human resource management systems	20.3	28.2	87.2	12.8	0.0	13.0	66.7
Computerized order entry	21.4	31.7	95.0	2.5	2.5	12.5	66.1
Computerized inventory control	44.3	36.5	92.7	4.9	2.4	17.7	38.0
Expert systems for decision support tool	7.3	35.7	85.7	7.1	7.1	7.3	85.4
Computerized financial systems	81.8	33.8	87.6	4.6	7.8	3.1	15.1
Electronic scanning systems	1.6	66.7	100.0	0.0	0.0	6.8	91.7
Computer assisted education and training	9.4	44.4	94.4	5.6	0.0	7.8	82.8
Electronic funds transfer	10.9	38.1	100.0	0.0	0.0	7.8	81.3
Automatic teller machines				•	•		
Transportation systems	2.1	25.0	100.0	0.0	0.0	1.6	96.4
Computer reservation systems	4.2	37.5	87.5	12.5	0.0	3.1	92.7
Automated storage and retrieval systems	2.6	40.0	100.0	0.0	0.0	2.1	95.3
Point of sale terminals	37.0	42.3	85.9	7.0	7.0	9.9	53.1
Smart cards		•	,	•			
Computer-aided design (CAD)	4.2	25.0	100.0	0.0	0.0	3.1	92.7
Computer-aided engineering (CASE)	0.0	•				1.0	99.0
Computer-aided software engineering (CASE)	0.0	•	,		•	1.0	99.0
In-room management systems						•	•
In-room video systems	•					•	•
In-room check out systems	•				•		
Property management systems	6.3	16.7	100.0	0.0	0.0	6.3	87.5

USE OF TECHNOLOGY BASED ON EMPLOYMENT All Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%
Personal computers	, 95.7	1.7	2.6
Online terminals	87.1	2.0	11.0
Mainframe computer	67.0	1.4	31.6
Mini-computer	63.8	3.2	33.0
Electronic mail - private	54.4	12.1	33.5
Electronic mail - public	15.6	11.1	73,3
Voice mail	15.1	10.3	74.6
Video conferencing	8.7	7.9	83.5
Facsimile	95.2	1.3	3.5
Desktop publishing	49.2	13.2	37.6
External databases	33.2	11.3	55.4
Telex	48.7	0.3	50.9
Local area networks	62.7	14.0	23,3
Wide area networks	44.9	8.9	46.1
Electronic data interchange	31.6	20.4	48.1
Mobile data communications	15.6	7.8	76.6
Satellite data distribution	11.1	6.9	82.0
Human resource management systems	61.9	11.0	27.0
Computerized order entry	58.2	7.6	34.2
Computerized inventory control	67.3	7.4	25.3
Expert systems for decision support tool	18.7	19.7	61.6
Computerized financial systems	93.4	2.2	4.4
Electronic scanning systems	28.5	15.7	55.8
Computer assisted education and training	39.7	9.9	50.4
Electronic funds transfer	31.5	11.2	57.3
Automatic teller machines	9.5	1.2	89.2
Transportation systems	27.4	3,5	69.1
Computer reservation systems	16.1	1.8	82.0
Automated storage and retrieval systems	13.9	7.9	78.2
Point of sale terminals	36.4	6.0	57.6
Smart cards	0.0	9.3	90.7
Computer-aided design (CAD)	23.3	7,5	69.2
Computer-aided engineering (CASE)	11.2	3.2	85.6
Computer-aided software engineering (CASE)	16.0	14.0	70.1
In-room management systems	1.8	1.5	96.7
In-room video systems	2.3	0.6	97.1
in-room check out systems	1.5	1.1	97.5
Property management systems	15.3	7.9	76.8

USE OF TECHNOLOGY BASED ON EMPLOYMENT Transportation

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%
Personal computers	, 97.2	1.1	1.7
Online terminals	93.4	1.6	4.9
Mainframe computer	77.4	0.9	21.6
Mini-computer	68.7	2.0	29.3
Electronic mail - private	75.7	9.6	14.7
Electronic mail - public	6.8	6.8	86.4
Voice mail	24.1	5.5	70.4
Video conferencing	0.1	10.8	89.1
Facsimile	97.9	1.5	0.6
Desktop publishing	61.6	17.4	21.0
External databases	32.8	15.2	52.0
Telex	37.6	0.1	62.3
Local area networks	63.9	12.3	23.8
Wide area networks	33.2	10.0	56.8
Electronic data interchange	26.5	19.7	53.8
Mobile data communications	16.6	8.7	74.7
Satellite data distribution	10.7	4.9	84.3
Human resource management systems	74.7	8.6	16.7
Computerized order entry	54.6	7.7	37.7
Computerized inventory control	77.0	6.6	16.4
Expert systems for decision support tool	33.1	12.8	54.1
Computerized financial systems	96.0	2.0	2.0
Electronic scanning systems	31.1	17,7	51.2
Computer assisted education and training	36.4	10.4	53.2
Electronic funds transfer	19.3	8.8	71.9
Automatic teller machines			
Transportation systems	77.1	4.6	18.3
Computer reservation systems	35.9	3.1	61.0
Automated storage and retrieval systems	19.2	2.6	78.2
Point of sale terminals	12.6	2.8	84.6
Smart cards	•		•
Computer-aided design (CAD)	27.4	7.0	65.6
Computer-aided engineering (CASE)	13.5	7.5	79.0
Computer-aided software engineering (CASE)	20.8	14.3	64.9
in-room management systems	•		
In-room video systems	•		
In-room check out systems			
Property management systems	8.8	5.0	86.2

USE OF TECHNOLOGY BASED ON EMPLOYMENT Communications

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	*	%
Personal computers	,100.0	0.0	0.0
Online terminals	98.9	0.0	1.1
Mainframe computer	77.5	1.2	21.2
Mini-computer	89.2	0.5	10.2
Electronic mail - private	72.6	16.3	11.1
Electronic mail - public	67.3	3.3	29.3
Voice mail	51.1	23.9	25.0
Video conferencing	49.4	24.0	26.6
Facsimile	99.9	0.0	0.1
Desktop publishing	81.6	8.4	10.0
External databases	84.6	3.5	11.9
Telex	37.3	3.2	59.5
Local area networks	91.1	4.4	4.5
Wide area networks	73.3	7.6	19.1
Electronic data interchange	49.3	19.8	30.9
Mobile data communications	65.0	16.5	18.5
Satellite data distribution	54.9	6.4	38.6
Human resource management systems	90.3	5.3	4.4
Computerized order entry	68.0	25.6	6.4
Computerized inventory control	60.0	4.0	36.0
Expert systems for decision support tool	9.0	33.6	57.5
Computerized financial systems	86,0	0.0	14.0
Electronic scanning systems	30.3	35.4	34.3
Computer assisted education and training	57.9	12.5	29.6
Electronic funds transfer	41.0	4.1	54.9
Automatic teller machines			•
Transportation systems	15.1	0.0	84.9
Computer reservation systems	14.5	0.5	84.9
Automated storage and retrieval systems	16.9	25.2	57.9
Point of sale terminals	42.1	7.1	50.8
Smart cards			
Computer-aided design (CAD)	71.2	0.5	28.3
Computer-aided engineering (CASE)	27.8	11.1	61.1
Computer-aided software engineering (CASE)	38.2	17.3	44.5
In-room management systems			
In-room video systems	•		
In-room check out systems			
Property management systems	6.2	3.7	90.1

USE OF TECHNOLOGY BASED ON EMPLOYMENT Wholesale Trade Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	*
Personal computers	∍ 94.5	3.1	2.3
Online terminals	88.1	1.8	10.1
Mainframe computer	51.3	2.1	46.6
Mini-computer	65.3	4.8	29.9
Electronic mail - private	40.0	12.9	47.1
Electronic mail - public	19.5	11.7	68.8
Voice mail	7.3	10.0	82.7
Video conferencing	2.3	6.9	90.9
Facsimile	96.9	0.4	2.8
Desktop publishing	37.9	13.6	48.5
External databases	21.8	9.7	68.5
Telex	52.2	0.0	47.8
Local area networks	48.4	16.5	35.1
Wide area networks	42.0	8.0	50.0
Electronic data interchange	35.7	25.1	39.2
Mobile data communications	11.3	7.8	81.0
Satellite data distribution	4.4	7.2	88.5
Human resource management systems	43.4	16.9	39.7
Computerized order entry	87.1	6.5	6.5
Computerized inventory control	86.8	8.0	5.2
Expert systems for decision support tool	14.2	13.5	72.3
Computerized financial systems	92.8	3.5	3.8
Electronic scanning systems	24.9	18.1	57.0
Computer assisted education and training	26.8	11.4	61.8
Electronic funds transfer	22.0	8.1	69.9
Automatic teller machines			
Transportation systems	18.4	7.9	73.7
Computer reservation systems	2.4	1.5	96.0
Automated storage and retrieval systems	12.1	6.8	81.1
Point of sale terminals	27.6	8.4	64.0
Smart cards	,		
Computer-aided design (CAD)	20.4	6.6	73.1
Computer-aided engineering (CASE)	9.8	4.7	85.5
Computer-aided software engineering (CASE)	8.3	13.8	77.8
In-room management systems			
In-room video systems			
In-room check out systems			
Property management systems	10.0	5.3	84.6

USE OF TECHNOLOGY BASED ON EMPLOYMENT Retail Trade Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	%
Personal computers	95.0	1.6	3.5
Online terminals	84.1	1.2	14.6
Mainframe computer	74.0	0.9	25.0
Mini-computer	56.0	3.9	40.1
Electronic mail - private	51.9	14.7	33.4
Electronic mail - public	12.3	17.8	69.8
Voice mail	16.3	12.0	71.6
Video conferencing	7.0	1.7	91.3
Facsimile	92.9	1.5	5.6
Desktop publishing	39.9	13.4	46.7
External databases	17.2	16.8	65.9
Telex	56.1	0.0	43.9
Local area networks	57.9	19.2	22.8
Wide area networks	46.4	7.6	46.0
Electronic data interchange	21.6	34.6	43.9
Mobile data communications	7.7	5.0	87.3
Satellite data distribution	8.3	14.3	77.4
Human resource management systems	49.4	9.5	41.1
Computerized order entry	78.2	4.8	17.0
Computerized inventory control	82.8	5.0	12.2
Expert systems for decision support tool	16.0	29.9	54.0
Computerized financial systems	93.4	1.2	5.3
Electronic scanning systems	49.8	13.9	36.3
Computer assisted education and training	31.1	5.3	63.6
Electronic funds transfer	24.4	22.7	52.9
Automatic teller machines			
Transportation systems	34.7	2.9	62.4
Computer reservation systems	15.1	0.6	84.3
Automated storage and retrieval systems	18.8	8.4	72.9
Point of sale terminals	80.8	5.7	13.5
Smart cards			
Computer-aided design (CAD)	22.8	8.8	68.4
Computer-aided engineering (CASE)	15.5	0.5	84.1
Computer-aided software engineering (CASE)	17.4	13.9	68.7
In-room management systems	11.47	10.0	
In-room video systems	•	•	•
In-room check out systems	•	•	•
Property management systems	13.1	5.8	81.2

USE OF TECHNOLOGY BASED ON EMPLOYMENT Finance and Insurance Industries

•	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	*
Personal computers	97.6	1.7	0.7
Online terminals	98.4	0.2	1.4
Mainframe computer	89.5	1.1	9.4
Mini-computer	71.4	3.0	25.5
Electronic mail - private	73.3	6.3	20.4
Electronic mail - public	10.5	8.1	81.5
Voice mail	8.7	8.7	82.7
Video conferencing	19.2	13.1	67.8
Facsimile	98,3	0.4	1.3
Desktop publishing	54.8	6.2	39.0
External databases	47.0	9.1	43.9
Telex	59.6	0.3	40.2
Local area networks	83.2	8.1	8.7
Wide area networks	70.0	6.0	24.0
Electronic data interchange	46.2	11.0	42.9
Mobile data communications	24.3	13.1	62.6
Satellite data distribution	12.1	1.8	86.1
Human resource management systems	84.0	9.1	6.9
Computerized order entry	42.3	2.0	55.7
Computerized inventory control	51.0	3.9	45.1
Expert systems for decision support tool	11.4	21.2	67.3
Computerized financial systems	95.8	2.5	1.7
Electronic scanning systems	19.6	12.3	68.1
Computer assisted education and training	69.0	12.2	18.7
Electronic funds transfer	74.4	4.8	20.7
Automatic teller machines	56.6	2.5	40.9
Transportation systems	7.0	1.8	91.2
Computer reservation systems	2.3	0.6	97.1
Automated storage and retrieval systems	9.1	12.8	78.1
Point of sale terminals	8.6	5.2	86.2
Smart cards	0.0	16,9	83.0
Computer-aided design (CAD)	8.9	12.5	78.6
Computer-aided engineering (CASE)	1.4	1.0	97.6
Computer-aided software engineering (CASE)	13.4	23.9	62.7
In-room management systems			•
In-room video systems			
In-room check out systems			
Property management systems	14.6	22.0	63.3

USE OF TECHNOLOGY BASED ON EMPLOYMENT Real Estate Operator and Insurance Agents

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	%	%	*
Personal computers	, 96.5	0.8	2.6
Online terminals	90.8	0.3	8.9
Mainframe computer	55.9	0.4	43.7
Mini-computer	53.9	3,3	42.8
Electronic mail - private	44.7	15.4	39.9
Electronic mail - public	12.3	16.3	71.4
Voice mail	10.6	15.2	74.2
Video conferencing	0.5	3.6	96.0
Facsimile	98.0	0.4	1.6
Desktop publishing	42.9	21.9	35.2
External databases	36.1	9.3	54.5
Telex	28.9	0.0	71.1
Local area networks	55.4	9.0	35.7
Wide area networks	34.3	6.7	59.0
Electronic data interchange	15.9	15.1	69.1
Mobile data communications	7.2	4.5	88.3
Satellite data distribution	6.6	2.6	90.8
Human resource management systems	47.1	14.0	38.8
Computerized order entry	23.1	10.0	66.8
Computerized inventory control	32.5	14.9	52.6
Expert systems for decision support tool	18.8	7.8	73.4
Computerized financial systems	91.3	1.0	7.7
Electronic scanning systems	13.4	10.1	76,5
Computer assisted education and training	28.2	20.7	51.0
Electronic funds transfer	24.7	11.8	63.4
Automatic teller machines			
Transportation systems	0.2	6.6	93.1
Computer reservation systems	5,9	1.2	92.8
Automated storage and retrieval systems	7.5	11.2	81.3
Point of sale terminals	10.0	2.8	87.1
Smart cards	•		
Computer-aided design (CAD)	9.6	10.8	79.6
Computer-aided engineering (CASE)	2.7	3.9	93.4
Computer-aided software engineering (CASE)	5.8	16.8	77.4
In-room management systems			
In-room video systems	•		
In-room check out systems			
Property management systems	45.6	4.6	49.7

USE OF TECHNOLOGY BASED ON EMPLOYMENT Business Service Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	*
Personal computers	, 95.4	0.9	3.6
Online terminals	73.6	5.6	20.8
Mainframe computer	41.2	2.0	56.9
Mini-computer	65.0	4.1	30.8
Electronic mail - private	37.6	16.4	46.1
Electronic mail - public	25.6	11.2	63.2
Voice mail	9.1	11.2	79.6
Video conferencing	6.1	7.4	86.6
Facsimile	92.6	1.7	5.7
Desktop publishing	48.6	13.7	37.7
External databases	40.3	4.5	55.3
Telex	38.5	0.8	60.7
Local area networks	60.8	12.5	26.7
Wide area networks	38,5	12.4	49.0
Electronic data interchange	35.0	11.3	53.7
Mobile data communications	8.2	7.8	83.9
Satellite data distribution	8.2	5.4	86.4
Human resource management systems	58.5	14.3	27.3
Computerized order entry	37.3	9.6	53.1
Computerized inventory control	40.6	11.5	47.9
Expert systems for decision support tool	19.6	16.6	63.9
Computerized financial systems	93.1	3.9	3.0
Electronic scanning systems	13.9	21.2	64.9
Computer assisted education and training	33.9	10.0	56.2
Electronic funds transfer	19.8	7.6	72.7
Automatic teller machines	•		
Transportation systems	9.4	4.2	86,4
Computer reservation systems	3.9	4.0	92.1
Automated storage and retrieval systems	12.8	2.6	84.6
Point of sale terminals	1.5	8.5	89.9
Smart cards	,		•
Computer-aided design (CAD)	25.7	2.9	71.4
Computer-aided engineering (CASE)	17.4	2.0	80.6
Computer-aided software engineering (CASE)		7.9	71.7
In-room management systems			•
In-room video systems			<u> </u>
In-room check out systems			
Property management systems	8.2	3.6	88.2
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USE OF TECHNOLOGY BASED ON EMPLOYMENT Accomodation, Food and Beverage Service Industries

	CURRENTLY USED IN OPERATIONS	PLAN TO USE IN NEXT 3 YRS.	DON'T PLAN TO USE IN NEXT 3 YRS.
	*	%	*
Personal computers	, 91.1	3.7	5.2
Online terminals	71.3	4.9	23.8
Mainframe computer	36.0	2.6	61.4
Mini-computer	49.1	2.7	48.2
Electronic mail - private	20.2	10.9	69.0
Electronic mail - public	6.3	8.5	85.2
Voice mail	4.4	7.8	87.8
Video conferencing	0.1	4.1	95.8
Facsimile	89.8	3.0	7.3
Desktop publishing	39.2	16.7	44.1
External databases	28.7	8.3	63.0
Telex	48.6	0.3	51.0
Local area networks	43.1	18.9	38.0
Wide area networks	17.5	14.0	68.6
Electronic data interchange	27.9	7.6	64.6
Mobile data communications	8.1	0.9	91.0
Satellite data distribution	4.7	2.6	92.7
Human resource management systems	47.8	14.9	37.3
Computerized order entry	35.1	12.4	52.6
Computerized inventory control	58.4	15.5	26.2
Expert systems for decision support tool	21.7	8.6	69.6
Computerized financial systems	90.3	3.2	6.6
Electronic scanning systems	7.1	5.4	87.4
Computer assisted education and training	31.5	11.0	57.5
Electronic funds transfer	18.2	7.2	74.6
Automatic teller machines			
Transportation systems	1,1	1.6	97.3
Computer reservation systems	38.2	3,6	58.1
Automated storage and retrieval systems	4.0	4.4	91.6
Point of sale terminals	57.7	8.6	33.7
Smart cards			·
Computer-aided design (CAD)	19.8	5.3	74.9
Computer-aided engineering (CASE)	1.0	1.8	97.2
Computer-aided software engineering (CASE)	2.0	1.7	96.2
In-room management systems	17.5	8.3	74.2
In-room video systems	21.6	2.9	75.4
In-room check out systems			· · · · · · · · · · · · · · · · · · ·
III IOOIII GIOON OUL SYSTOIIIS	13.9	9.2	76.9

All Industries

CURRENTLY USED IN OPERATIONS PLAN TO USE IN NEXT 3 YRS DON'T PLAN TO USE IN NEXT							
					DON'T PLAN TO USE IN NEXT 3 YRS		
	Number of	employees >=200	Number o	f employees >=200	Number o	етрюуеез >=200	
	<u> </u>	*	*	*	*	*	
Personal computers	85.2	93.6	4.4	2.2	10.4	4.1	
Online terminals	70.7	81.3	4,8	3.2	24.5	15.6	
Mainframe computer	33.6	49.7	2.3	2.2	64.1	48.2	
Mini-computer	50.8	58.3	4.6	4.1	44.5	37.6	
Electronic mail - private	22.8	38.6	12.0	15.6	65.2	45.8	
Electronic mail - public	7.8	12.6	6.5	11.0	85.7	76.4	
Voice mail	2.9	8.8	4.5	10.3	92.6	80.9	
Video conferencing	1.8	2.3	3.5	6.5	94.7	91.2	
Facsimile	85.6	92.8	4.2	2.5	10.2	4.7	
Desktop publishing	23.5	37.9	13.5	17.1	63.0	45.1	
External databases	15.6	30.4	7.8	8.7	76.6	60.9	
Telex	32.3	39.7	0.1	0.6	67.6	59.6	
Local area networks	33.5	47.6	15.4	17.9	51.1	34.4	
Wide area networks	24.0	34.5	8.9	11.4	67.1	54.1	
Electronic data interchange	16.3	22.5	14.3	17.8	69.4	59.7	
Mobile data communications	9.7	12.2	4.1	6.1	86.2	81.7	
Satellite data distribution	1.8	5.0	3.6	5.7	94.5	89.2	
Human resource management systems	22.6	46.0	15.2	16.3	62.2	37.7	
Computerized order entry	50.2	49.8	8.8	9.3	41.0	41.0	
Computerized inventory control	54.8	58.1	12.5	11.2	. 32.7	30.8	
Expert systems for decision support tool	10.5	14.1	9.2	16.7	80,3	69.1	
Computerized financial systems	84.8	91.2	4.2	3.1	11.0	5.7	
Electronic scanning systems	10.5	19,1	14.2	14.6	75.3	66.3	
Computer assisted education and training	17.1	27.8	9.9	12.8	73.0	59.5	
Electronic funds transfer	14.2	21.9	7.5	10.6	78.3	67.5	
Automatic teller machines	0.8	2.2	1.7	1.5	97.5	96.3	
Transportation systems	9.2	16.3	4.2	3.7	86.6	80.0	
Computer reservation systems	7.5	10.9	1.8	2.8	90.6	86.3	
Automated storage and retrieval systems	7.8	11.7	4.1	4.8	88.1	83.5	
Point of sale terminals	20.3	24.9	8.1	8.5	71.7	66.7	
Smart cards	0.1	0.0	2.2	5.4	97.7	94.6	
Computer-aided design (CAD)	10.0	18,8	3.9	5.3	86.1	75.9	
Computer-aided engineering (CASE)	4.2	8.7	3.0	4.1	92.8	87.2	
Computer-aided software engineering (CASE)	3.6	9.7	5.3	11.7	91.1	78.5	
In-room management systems	1.0	2.6	1.5	2.2	97.5	95.2	
In-room video systems	1.4	3.9	1,4	1.4	97.3	94.7	
In-room check out systems	0.4	1.6	1.2	2.4	98.4	96.0	
Property management systems	6.4	12.6	3.2	5.3	90.4	82.1	

Transportation

nansponanon									
	CURRENTLY USE	D IN OPERATIONS	PLAN TO USE	IN NEXT 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS				
	Number of	employees	Number of	employees	Number of employees				
	<200	>=200	<200	>=200	<200	>=200			
Personal computers	% 99.4	% 04.0	<u>%</u>	*	* · · · ·	*			
Online terminals	88.4	94.2	5.3	1.2	6.3	4.6			
	72.0	88.4	9.0	3.5	19.0	8.1			
Mainframe computer	36.5	56.1	4.2	2.3	59.3	41.6			
Mini-computer	51.3	66.5	9.5	3.5	39.2	30.1			
Electronic mail - private	26.5	50.3	15.9	17.9	57.7	31.8			
Electronic mail - public	6.3	8.1	7.9	12.7	85.7	79.2			
Voice mail	2.1	6.9	6.9	9.2	91.0	83.8			
Video conferencing	1.1	0.0	2.1	5.2	96.8	94.8			
Facsimile	90.5	96.5	5.3	2.9	4.2	0.6			
Desktop publishing	29.6	35.3	14.3	24.3	56.1	40.5			
External databases	15.9	34.1	11.6	11.6	72.5	54.3			
Telex	30.2	39,3	0.5	0.0	69.3	60.7			
Local area networks	35.4	42.8	19.0	24.3	45.5	32.9			
Wide area networks	24.3	35.3	9.5	13.9	66.1	50.9			
Electronic data interchange	14.3	25.4	17.5	27.7	68.3	46.8			
Mobile data communications	16.9	26.0	7.4	9.8	75.7	64.2			
Satellite data distribution	1.6	6.4	3.7	8.1	94.7	85.5			
Human resource management systems	30.7	56.6	19.0	13.9	50.3	29.5			
Computerized order entry	33.3	53.8	16.4	8.1	50.3	38.2			
Computerized inventory control	42.9	62.4	20.6	11.6	36.5	26.0			
Expert systems for decision support tool	7.9	17.3	10.1	19.1	82.0	63.6			
Computerized financial systems	87.8	93.1	5.8	2.9	6.3	4.0			
Electronic scanning systems	11.1	23.7	10.1	23.1	78.8	53.2			
Computer assisted education and training	20.1	32.9	9.0	13.3	70.9	53.8			
Electronic funds transfer	13.8	14.5	7.9	14.5	78.3	71.1			
Automatic teller machines			•						
Transportation systems	37.0	67.6	15.3	6.4	47.6	26.0			
Computer reservation systems	14.8	18.5	2.6	4.6	82.5	76.9			
Automated storage and retrieval systems	10.6	15.0	5.8	2.9	83.6	82.1			
Point of sale terminals	10.1	9.8	3.7	6.4	86.2	83.8			
Smart cards									
Computer-aided design (CAD)	13.8	26.0	8.5	9.2	77.8	64.7			
Computer-aided engineering (CASE)	6.3	13.3	7.9	10.4	85.7	76.3			
Computer-aided software engineering (CASE)	3.2	12.7	11.1	17.3	85.7	69.9			
in-room management systems						7710			
In-room video systems		•	•	•	•	•			
in-room check out systems		•	•	•		•			
Property management systems	4.2	15.0	5.3	6.4	90.5	78.6			
Traperty incanagoment oforomo	4,4	19.0	ა.ა	0.4	30.3	10.0			

Communications

	I	D IN OPERATIONS		IN NEXT 3 YRS	DON'T PLAN TO U	DON'T PLAN TO USE IN NEXT 3 YRS		
	Number of	employees	Number of	f employees	Number of employees			
	<200	>=200	<200	>=200	<200	>=200		
	*	*	*	*	*	*		
Personal computers	100.0	100.0	0,0	0.0	0.0	0.0		
Online terminals	79.3	98.0	0.0	0.0	20.7	2.0		
Mainframe computer	51.7	48.0	0.0	2.0	48.3	50.0		
Mini-computer	44.8	80.0	3.4	2.0	51.7	18.0		
Electronic mail - private	34.5	50.0	17.2	32.0	48.3	18.0		
Electronic mail - public	24.1	44.0	6.9	8.0	69.0	48.0		
Voice mail	13.8	20.0	3.4	18.0	82.8	62.0		
Video conferencing	6.9	16.0	10.3	20.0	82.8	64.0		
Facsimile	96.6	100.0	0.0	0.0	3.4	0.0		
Desktop publishing	37.9	58.0	10.3	26.0	51.7	16.0		
External databases	17.2	58.0	10.3	10.0	72.4	32.0		
Telex	48.3	50.0	0.0	6.0	51.7	44.0		
Local area networks	41.4	72.0	20.7	18.0	37.9	10.0		
Wide area networks	31.0	44.0	17.2	16.0	51.7	40.0		
Electronic data interchange	6.9	28.0	17.2	20.0	75.9	52.0		
Mobile data communications	24.1	36.0	10.3	16.0	65.5	48.0		
Satellite data distribution	10.3	18.0	13.8	18.0	75.9	64.0		
Human resource management systems	27.6	78.0	27.6	16.0	44.8	6.0		
Computerized order entry	58.6	70.0	0.0	14.0	41.4	16.0		
Computerized inventory control	65.5	72.0	6.9	10.0	27.6	18.0		
Expert systems for decision support tool	10.3	10.0	6.9	20.0	82.8	70.0		
Computerized financial systems	89.7	96.0	0.0	0.0	10.3	4.0		
Electronic scanning systems	17.2	28.0	17.2	24.0	65.5	48.0		
Computer assisted education and training	24.1	36.0	10.3	28.0	65.5	36.0		
Electronic funds transfer	17.2	24.0	3.4	8.0	79.3	68.0		
Automatic teller machines	•							
Transportation systems	0.0	8.0	0.0	0.0	100.0	92.0		
Computer reservation systems	0.0	6.0	3.4	2.0	96.6	92.0		
Automated storage and retrieval systems	17.2	6.0	6.9	8.0	75.9	86.0		
Point of sale terminals	13.8	14.0	0.0	14.0	86.2	72.0		
Smart cards								
Computer-aided design (CAD)	27.6	72.0	10.3	0.0	62.1	28.0		
Computer-aided engineering (CASE)	17.2	24.0	17.2	8.0	65.5	68.0		
Computer-aided software engineering (CASE)		14.0	3.4	18.0	89.7	68.0		
In-room management systems								
In-room video systems								
In-room check out systems		•						
Property management systems	3.4	10.0	0.0	8.0	96.6	82.0		

Wholesale Trade Industries

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	CURRENTLY USE	D IN OPERATIONS	PLAN TO USE	IN NEXT 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
	Number of employees		Number o	f employees	Number of employees		
	<200	>=200	<200	>=200	<200	>=200	
Personal computers	% 89.1	96.7	3.6	1.4	7.3	1.9	
Online terminals	83.6	90.1	3.2	2,3	13.2	7.5	
Mainframe computer	39.0	56.8	1.6	2.3	59.5	40.8	
Mini-computer	62.0	62.9	2.1	3.8	36.0	33.3	
Electronic mail - private	24.8	46.5	12.3	12.2	62.9	41.3	
Electronic mail - public				 	82.2	73.7	
Voice mail	10.5	16.0 9.4	7.3	10.3	94.1	78.9	
Video conferencing			3.2	11.7			
Facsimile	2.1	1.9	3.4	7.0	94.5	91.1	
	94.8	97.2	0.9	0.5	4.3	2.3	
Desktop publishing	24.4	43.7	16.4	15.0	59.2	41.3	
External databases	13.7	23.9	8.0	11.7	78.4	64.3	
Telex	46.5	54.5	0.0	0.0	53,5	45.5	
Local area networks	36.4	48.4	14.8	18.3	48.7	33.3	
Wide area networks	31.9	40.4	9.3	7.5	58.8	52.1	
Electronic data interchange	21.0	32.9	21.6	26.3	57.4	40.8	
Mobile data communications	11.4	13.1	5.9	8.0	82.7	78.9	
Satellite data distribution	3.0	6.1	3.6	8.5	93.4	85.4	
Human resource management systems	23.0	45.5	14.6	18.3	62.4	36.2	
Computerized order entry	82.0	90.1	6.6	4.2	11.4	5.6	
Computerized inventory control	83.4	89.7	8.4	5.6	8.2	4.7	
Expert systems for decision support tool	14.1	16.0	8.9	14.6	77.0	69.5	
Computerized financial systems	89.7	94.8	3.4	1.4	6.8	3.8	
Electronic scanning systems	10.3	23.5	19.8	16.9	69.9	59.6	
Computer assisted education and training	18.0	30.5	9.3	12.2	72.7	57.3	
Electronic funds transfer	14.4	19.2	7.7	9.9	77.9	70.9	
Automatic teller machines	•		•				
Transportation systems	8.0	22.5	5.2	7.0	86.8	70.4	
Computer reservation systems	2.5	2.3	1.1	1.4	96.4	96.2	
Automated storage and retrieval systems	8.2	15.0	4.6	8.5	87.2	76.5	
Point of sale terminals	16.4	24.9	8.7	9.4	74.9	65.7	
Smart cards	•						
Computer-aided design (CAD)	12.1	19.7	5.0	6.1	82.9	74.2	
Computer-aided engineering (CASE)	4.6	10.3	2.7	5.2	92.7	84.5	
Computer-aided software engineering (CASE)		10.3	4.3	16.0	90.9	73.7	
In-room management systems				,			
In-room video systems							
In-room check out systems							
Property management systems	2.7	7.0	1.6	2.8	95.7	90.1	

Retail Trade Industries

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	CURRENTLY USED	IN OPERATIONS	PLAN TO USE	N NEXT 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
[Number of	employees	Number of employees		Number of employees		
[<200	≻-200	<200	>=200	<200	>=200	
Personal computers	% 79.9	89.0	% 5.1	3.3	15.0	7.7	
Online terminals	63.3	71.8	5.1	2.9	31.6	25.4	
Mainframe computer		45.9	1.9	1.4	64.9	52.6	
	33.2				53,4	41.1	
Mini-computer	41.9	54.5	4.8	4.3	75.1	61.2	
Electronic mail - private	18.5	28.2	6.4	10.5		· · · · · · · · · · · · · · · · · · ·	
Electronic mail - public	4.5	9.1	3.5	7.2	92.0	83.7	
Voice mail	2.2	8.1	1.9	3.3	95.8	88.5	
Video conferencing	2.2	1.0	1.6	2.4	96.2	96.7	
Facsimile	74.8	89.5	8.6	2.4	16.6	8.1	
Desktop publishing	15.7	23.0	8.3	11.5	76.0	65.6	
External databases	8.3	11.0	8.0	8.6	83.7	80.4	
Telex	13.1	25.8	0.3	0.0	86.6	74.2	
Local area networks	26.5	41.6	11.8	15.3	61.7	43.1	
Wide area networks	23.0	21.1	6.7	6.7	70.3	72.2	
Electronic data interchange	17.6	12.4	9.9	15.8	72.5	71.8	
Mobile data communications	5.8	8.1	2.2	1.4	92.0	90.4	
Satellite data distribution	1.0	3.3	4.5	2.4	94.6	94.3	
Human resource management systems	17.9	31.1	11.8	13.4	70.3	55.5	
Computerized order entry	60.7	62.7	8.0	11.0	31.3	26.3	
Computerized inventory control	64.9	68.4	12.5	10.5	22.7	21.1	
Expert systems for decision support tool	10.2	12.0	5.1	11.5	84.7	76.6	
Computerized financial systems	81.5	86.6	3.8	3.8	14.7	9.6	
Electronic scanning systems	16.0	32.1	16.3	12.0	67.7	56.0	
Computer assisted education and training	12.5	16.7	7.0	6.7	80.5	76.6	
Electronic funds transfer	12.5	24.9	8.9	9.6	78.6	65.6	
Automatic teller machines							
Transportation systems	4.5	6.7	1.3	2.9	94.2	90.4	
Computer reservation systems	2.6	3.8	1.0	0.5	96.5	95.7	
Automated storage and retrieval systems	6.4	8.6	2.9	2.4	90.7	89.0	
Point of sale terminals	41.9	54.5	13.7	10.5	44.4	34.9	
Smart cards	•				•		
Computer-aided design (CAD)	2.6	12.9	1.0	3.8	96.5	83.3	
Computer-aided engineering (CASE)	0.6	3.8	1.0	1.0	98.4	95.2	
Computer-aided software engineering (CASE)	1.0	3.8	1.6	4.3	97.4	91.9	
In-room management systems	•						
In-room video systems			<u> </u>				
In-room check out systems	•	•				 	
Property management systems	0.6	5.7	2,6	4.3	95.8	90.0	

Finance and Insurance Industries

rillance	T	D IN OPERATIONS		· · · · · · · · · · · · · · · · · · ·	DONIT DE AN TO LICE MENEUT A VIDO		
			***************************************	IN NEXT 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
	Number of	employees >=200		employees >=200		f employees	
	*	>=200 %	<u><</u> 200 %	>=200	∠200	>=200 %	
Personal computers	93.9	96.0	0.0	2.0	6.1	2.0	
Online terminals	90.2	94.6	0.0	0.7	9.8	4.7	
Mainframe computer	47.6	77.2	1.2	2.0	51.2	20.8	
Mini-computer	54.9	51.7	4.9	6.0	40.2	42.3	
Electronic mail - private	39.0	59.1	25.6	14.8	35.4	26.2	
Electronic mail - public	9.8	16.1	9.8	14.1	80.5	69.8	
Voice mail	4.9	11.4	11.0	18.1	84.1	70.5	
Video conferencing	2.4	3.4	3.7	11.4	93.9	85.2	
Facsimile	91.5	96.0	2.4	1.3	6.1	2.7	
Desktop publishing	37.8	57.0	28.0	14.8	34.0	28,2	
External databases	39.0	53.0	8.5	8.1	52.4	38.9	
Telex	47.6	43.0	0.0	0.7	52.4	56.4	
Local area networks	43.9	61.7	28.0	19.5	28.0	18.8	
Wide area networks	29.3	59.1	18.3	13.4	52.4	27.5	
Electronic data interchange	25.6	32.2	12.2	14.8	62.2	53.0	
Mobile data communications	8.5	5.4	1.2	6.0	90.2	88.6	
Satellite data distribution	2.4	6.0	3.7	4.7	93.9	89.3	
Human resource management systems	28.0	67.1	19.5	14.8	52.4	18.1	
Computerized order entry	20.7	32.9	9.8	4.7	69.5	62.4	
Computerized inventory control	13.4	47.0	19.5	8.1	67.1	45.0	
Expert systems for decision support tool	7.3	12.8	24.4	32.2	68.3	55.0	
Computerized financial systems	86.6	92.6	2.4	3.4	11.0	4.0	
Electronic scanning systems	9.8	17.4	12.2	13.4	78.0	69.1	
Computer assisted education and training	29.3	40.9	20.7	17.4	50.0	41.6	
Electronic funds transfer	36.6	43.6	12.2	12.8	51.2	43.6	
Automatic teller machines	13.4	18.1	7.3	4.7	79,3	77.2	
Transportation systems	3.7	3.4	0.0	2.0	96.3	94.6	
Computer reservation systems	2.4	2.7	1.2	1.3	96.3	96.0	
Automated storage and retrieval systems	8.5	14.1	8.5	5.4	82.9	80.5	
Point of sale terminals	3.7	8.7	13.4	11.4	82.9	79.9	
Smart cards	1.2	0.0	7.3	12.8	91.5	87.2	
Computer-aided design (CAD)	7.3	11.4	3.7	6,0	89.0	82.6	
Computer-aided engineering (CASE)	2.4	2.7	1.2	2.0	96.3	95.3	
Computer-aided software engineering (CASE)	7.3	14.8	17.1	21.5	75.6	63.8	
In-room management systems				•			
In-room video systems				•			
In-room check out systems					•	•	
Property management systems	6.1	12.8	6.1	5.4	87.8	81.9	

Real Estate Operator and Insurance Agents

Kedi Esidi	<u> </u>	<u> </u>			.300		
	CURRENTLY USE	D IN OPERATIONS	PLAN TO USE	N NEXT 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
	Number of	employees	Number of	employees	Number of	employees	
	<200	>=200	<200	>=200	<200	>=200	
Danasal agravitant	<u>%</u>	400.0	*	*	40.5	*	
Personal computers	85.5	100.0	3.9	0.0	10.5	0.0	
Online terminals	77.6	94.9	1.3	0.0	21.1	5.1	
Mainframe computer	21.1	52.5	1.3	0.0	77.6	47.5	
Mini-computer	55.3	50.8	7.9	3.4	36.8	45.8	
Electronic mail - private	23.7	42.4	15.8	18.6	60.5	39.0	
Electronic mail - public	3.9	8.5	5.3	15.3	90.8	76.3	
Voice mail	2.6	8.5	5.3	16.9	92.1	74.6	
Video conferencing	1.3	0.0	2,6	5.1	96.1	94.9	
Facsimile	90.8	98.3	1.3	0.0	7.9	1.7	
Desktop publishing	28.9	40.7	15.8	25.4	55.3	33.9	
External databases	18.4	42.4	3.9	8.5	77.6	49.2	
Telex	21.1	30.5	0.0	0.0	78.9	69.5	
Local area networks	34.2	55.9	17.1	11.9	48.7	32.2	
Wide area networks	18.4	35.6	6.6	5.8	75.0	55.9	
Electronic data interchange	11.8	18.6	9.2	13.6	78.9	67.8	
Mobile data communications	6.6	11.9	6.6	3.4	86.8	84.7	
Satellite data distribution	0.0	1.7	1.3	3.4	98.7	94.9	
Human resource management systems	26.3	42.4	17.1	15.3	56.6	42.4	
Computerized order entry	25.0	22.0	3.9	15.3	71.1	62.7	
Computerized inventory control	26.3	30.5	10.5	18.6	63.2	50.8	
Expert systems for decision support tool	15.8	15.3	10.5	8.5	73.7	76.3	
Computerized financial systems	89.5	91.5	2,6	1.7	7.9	6.8	
Electronic scanning systems	2.6	10.2	9.2	13.6	88.2	76.3	
Computer assisted education and training	10.5	32.2	18.4	13.6	71.1	54.2	
Electronic funds transfer	22.4	23.7	6.6	8.5	71.1	67.8	
Automatic teller machines							
Transportation systems	1.3	0.0	0.0	1.7	98.7	98.3	
Computer reservation systems	7.9	8.5	0.0	1.7	92,1	89.8	
Automated storage and retrieval systems	7.9	11.9	3.9	6.8	88.2	81.4	
Point of sale terminals	5.3	8.5	3.9	3.4	90.8	88.1	
Smart cards							
Computer-aided design (CAD)	10.5	10.2	5.3	11.9	84.2	78.0	
Computer-aided engineering (CASE)	2.6	3.4	5.3	5.1	92.1	91.5	
Computer-aided software engineering (CASE)		5.1	6.6	13.6	93.4	81.4	
In-room management systems					30.4	71.7	
In-room video systems	•		•	•	•	•	
In-room check out systems	•	•	•.	•	•	•	
Property management systems					50.0	54.0	
Froperty management systems	46.1	39.0	1.3	6.8	52.6	54.2	

Business Service Industries

	<u> </u>	00/1/0	<u> </u>	77700			
	CURRENTLY USE) IN OPERATIONS	PLAN TO USE	N NEXT 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
	Number of	employees	Number of	employees	Number of	employees	
	<200	>=200	<200	>=200	<200	>=200	
	*	%	*	*	*	*	
Personal computers	90.6	93.9 ,	1.9	1.9	7.5	4.2	
Online terminals	66.7	74.5	6.9	5.7	26.4	19.8	
Mainframe computer	28.3	40.6	2.5	2.4	69.2	57.1	
Mini-computer	56.0	60.8	4.4	4.2	39.6	34.9	
Electronic mail - private	28.3	33.5	15.1	22.2	56.6	44.3	
Electronic mail - public	13.2	15.6	11.3	14.6	75.5	69.8	
Voice mail	5.7	8.5	10.1	12.7	84.3	78.8	
Video conferencing	1.9	4.7	8.8	7.5	89.3	87.7	
Facsimile	87.4	91.0	1.9	2.8 .	10.7	6.1	
Desktop publishing	29.6	42.5	14.5	16.5	56.0	41.0	
External databases	35.2	40.6	7.5	6.1	57.2	53.3	
Telex	37.7	40.6	0.0	1.4	62.3	58.0	
Local area networks	45.9	55.2	20.1	13.7	34.0	31.1	
Wide area networks	20.8	36.8	11.3	14.2	67.9	49.1	
Electronic data interchange	17.0	20.3	13.8	13.2	69.2	66.5	
Mobile data communications	8.2	8.5	2.5	9.0	89.3	82.5	
Satellite data distribution	1.3	3.8	3.8	6.6	95.0	89.6	
Human resource management systems	24.5	49.1	17.0	18.9	58.5	32.1	
Computerized order entry	25.8	26.9	10.1	9.0	64.2	64.2	
Computerized inventory control	23.9	31.6	9.4	10.4	66.7	58.0	
Expert systems for decision support tool	10.7	14.2	15.1	20.3	74.2	65.6	
Computerized financial systems	85.5	92.5	3.1	4.2	11.3	3.3	
Electronic scanning systems	12.6	14,6	14.5	14,2	73.0	71.2	
Computer assisted education and training	23.3	30.7	13.2	13.2	63.5	56.1	
Electronic funds transfer	11.9	17.9	5.0	8.5	83,0	73.6	
Automatic teller machines	•						
Transportation systems	4.4	6.1	3.1	3.3	92.5	90.6	
Computer reservation systems	1.9	4.2	1.9	2.4	96.2	93.4	
Automated storage and retrieval systems	8.8	11.8	3.8	3.8	87.4	84.4	
Point of sale terminals	1.9	2,4	0.0	5.7	98.1	92.0	
Smart cards							
Computer-aided design (CAD)	21.4	23.6	1.9	2.8	76.7	73.6	
Computer-aided engineering (CASE)	11.3	16.0	2.5	3.3	86.2	80.7	
Computer-aided software engineering (CASE)	8.2	14.6	6.9	10.4	84.9	75.0	
In-room management systems							
In-room video systems	•	•	•	<u> </u>		·	
In-room check out systems	•	•	•	·	•	•	
					05.0	01.5	
Property management systems	3.1	5.2	1.9	3.3	95.0	91.5	

USE OF TECHNOLOGY BY SIZE OF FIRM Accomodation, Food and Beverage Service Industries

7100077104471071	CURRENTLY USED IN OPERATIONS			N NEXT 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
	Number of employees		Number of	employees	Number of	employees	
	<200	>=200	<200	>=200	<200	>=200	
Description of the second of t	*	*	*	<u> </u>	*	*	
Personal computers	70.6	88.9	9.0	4.8	20.3	6.3	
Online terminals	40.7	63.5	6.2	5.3	53.1	31.2	
Mainframe computer	18.6	28.0	3.4	3.2	78.0	68.8	
Mini-computer	31.1	48.7	4.5	3.7	64.4	47.6	
Electronic mail - private	6.8	15.9	5.6	11.1	87.6	73.0	
Electronic mail - public	1.7	3.7	2.8	7.4	95.5	88.9	
Voice mail	0.6	5.8	1.7	4.2	97.7	89.9	
Video conferencing	0.6	0.0	2.8	3.2	96.6	96.8	
Facsimile	68.4	84.1	7.9	6.3	23.7	9.5	
Desktop publishing	11.9	23.8	6.8	16.4	81.4	59.8	
External databases	3.4	15.3	4.0	5.8	92.7	78.8	
Telex	23.7	35.4	0.0	0.5	76.3	64.0	
Local area networks	18.6	29.1	7.9	20.1	73.4	50.8	
Wide area networks	7.9	17.5	4.0	13.8	88.1	68.8	
Electronic data interchange	3.4	13.8	3.4	9.5	93.2	76.7	
Mobile data communications	5.6	6.3	0.0	1.1	94.4	92.6	
Satellite data distribution	0.6	2.6	1.1	1.6	98.3	95.8	
Human resource management systems	14.7	25.9	11.9	18.0	73.4	56.7	
Computerized order entry	15.8	28.6	9.6	14.8	74.6	56.6	
Computerized inventory control	36.7	50.3	15.3	19.0	48.0	30.7	
Expert systems for decision support tool	4.0	13.2	4.0	8.5	92.1	78.3	
Computerized financial systems	71.2	86.8	7.9	4.2	20.9	9.0	
Electronic scanning systems	1.1	2.6	3.4	6.3	95.5	91.0	
Computer assisted education and training	10.7	14.8	5.6	11.1	83.6	74.1	
Electronic funds transfer	5.1	14.3	5.1	11,1	89.8	74.6	
Automatic teller machines			•		•	,	
Transportation systems	2.3	2.1	0.6	1.6	97.2	96.3	
Computer reservation systems	29.4	37.6	5.1	7.4	65.5	55.0	
Automated storage and retrieval systems	3.4	7.9	1.1	4.2	95.5	87.8	
Point of sale terminals	34.5	51.9	9.0	7.9	56.5	40.2	
Smart cards							
Computer-aided design (CAD)	1.7	6.9	1.7	3.7	96.6	89.4	
Computer-aided engineering (CASE)	0.0	2.1	0.0	2.1	100.0	95.8	
Computer-aided software engineering (CASE)	1.1	3.7	1.1	1.6	97.7	94.7	
In-room management systems	7.9	16.9	4.0	10.1	88.1	73.0	
In-room video systems	11.3	25.9	5.6	4.8	83.1	69.3	
In-room check out systems	3.4	10.6	6.2	14.3	90.4	75.1	
Property management systems	13.0	24.9	7.3	9.0	79.7	66.1	

USE OF TECHNOLOGY BY OWNERSHIP

All Industries

All illuusilles									
CURRENT	LY USED IN OP	ERATIONS	PLAN T	O USE IN NEX	T 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS			
Ownership				Ownership			Ownership		
Canada		·····					1	Other I ·	
								2.3	
		<u>-</u>				· · · · · · · · · · · · · · · · · · ·		11.0	
								48.6	
								41.0	
						 		47.4	
						 		76.9	
						 		83.8	
								93.6	
						 			
								2.3	
		 				 		46.2	
								67.6	
								34.1	
		 				<u> </u>		38.2	
27.1	42.9	32.4		9.5		 		57.8	
17.7	27.4	26.6	15.2	19.0	20.2			53,2	
10.9	9.9	11.6	4.8	6.7	6.4	84.3	83.3	82.1	
3.2	4.4	3.5	4.2	8.3	4.6	92.6	87.3	91.9	
31.7	46.0	38.2	15,9	13.9	15.6	52.5	40.1	46.2	
47.5	65.9	60.1	9.6	6.0	5.8	42.9	28.2	34.1	
54.0	70.6	65.9	12.8	6.7	6.9	33.1	22.6	27.2	
11.6	17.9	11.6	12.6	14.7	10.4	75.8	67.5	78.0	
87.2	89.3	93.6	4.0	2.0	2.3	8.9	8.7	4.0	
14.3	15.5	15.0	14.2	15.1	15.6	71.5	69.4	69.4	
20.9	32.9	21.4	11.3	10.7	10.4	67.8	56.3	68.2	
16.4	24.6	24.9	8.9	9.1	8.7	74.6	66.3	66.5	
1.6	0.0	0.6	1.6	2,0	1.2	96.8	98.0	98.3	
12.4	15.9	8.1	4.1	2.8	3.5	83.4	81.3	88.4	
9.3	4,4		2.5	0.8	1.7	88.2	94.8	85.5	
9.2			4.0	6.7	6.9	86.8	81.0	82.1	
						68.3	71.8	79.8	
								97.1	
							 	78.0	
								89.0	
							 	82.7	
							·	96.0	
								95.4	
								96.0	
						·		87.3	
	Canada % 87.7 73.5 39.6 54.2 27.7 9.1 4.7 2.1 87.7 28.2 21.8 32.3 39.4 27.1 17.7 10.9 3.2 31.7 47.5 54.0 11.6 87.2 14.3 20.9 16.4 1.6 12.4	Canada USA % % 87.7 96.8 73.5 85.7 39.6 48.4 54.2 54.0 27.7 44.0 9.1 15.5 4.7 13.1 2.1 1.6 87.7 94.4 28.2 42.5 21.8 26.2 32.3 46.0 39.4 43.3 27.1 42.9 17.7 27.4 10.9 9.9 3.2 4.4 31.7 46.0 47.5 65.9 54.0 70.6 11.6 17.9 87.2 89.3 14.3 15.5 20.9 32.9 16.4 24.6 1.6 0.0 12.4 15.9 9.3 4.4 9.2 12.3 23.2 19.8 0.0 0.0	Canada USA Other % % % 87.7 96.8 96.5 , 73.5 85.7 87.9 39.6 48.4 49.1 54.2 54.0 55.5 27.7 44.0 41.6 9.1 15.5 13.9 4.7 13.1 7.5 2.1 1.6 1.7 87.7 94.4 97.1 28.2 42.5 37.6 21.8 26.2 24.9 32.3 46.0 65.9 39.4 43.3 43.4 27.1 42.9 32.4 17.7 27.4 26.6 10.9 9.9 11.6 30.9 11.6 38.2 47.5 65.9 60.1 54.0 70.6 65.9 11.6 17.9 11.6 87.2 89.3 93.6 14.3 15.5 15.0	Canada USA Cheer Canada % % % % % 87.7 96.8 96.5 , 3.8 73.5 85.7 87.9 4.6 39.6 48.4 49.1 2.3 54.2 54.0 55.5 4.5 27.7 44.0 41.6 14.0 9.1 15.5 13.9 8.5 4.7 13.1 7.5 6.8 2.1 1.6 1.7 4.6 87.7 94.4 97.1 3.9 28.2 42.5 37.6 15.1 21.8 26.2 24.9 8.6 32.3 46.0 65.9 0.4 39.4 43.3 43.4 16.4 27.1 42.9 32.4 10.1 17.7 27.4 26.6 15.2 10.9 9.9 11.6 4.8 3.2 4.4	Canada USA Other Canada USA % % % % % 87.7 96.8 96.5 3 3.8 0.8 73.5 85.7 87.9 4.6 0.8 39.6 48.4 49.1 2.3 1.6 54.2 54.0 55.5 4.5 3.6 27.7 44.0 41.6 14.0 12.7 9.1 15.5 13.9 8.5 9.1 4.7 13.1 7.5 6.8 9.9 2.1 1.6 1.7 4.6 7.1 87.7 94.4 97.1 3.9 0.8 28.2 42.5 37.6 15.1 14.7 21.8 26.2 24.9 8.6 5.2 32.3 46.0 65.9 0.4 0.4 39.4 43.3 43.4 16.4 17.5 27.1 42.9 32.4 10.1 9.5	Canada USA Other Canada USA Other % <td>Canada USA Other Canada USA Other Canada %</td> <td>Canada USA Other Canada USA Max Max</td>	Canada USA Other Canada USA Other Canada %	Canada USA Other Canada USA Max Max	

Transportation

			<u> </u>	<u>unon</u>	<u>'</u>		1	-	
	CURRENT	LY USED IN OF	PERATIONS	PLAN T	O USE IN NEX	T 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
		Ownership			Ownership			Ownership	
	Canada	USA	Other	Caneda	USA	Other	Canada	USA	Other
Personal computers	90.7	% 04.4	100.0	%	<u>%</u>	30	5.7	- %	*
Personal computers	90.7	94.4	100.0	3,6	0.0	0.0	5.7	5.6	0.0
Online terminals	79.6	77.8	90.0	6.3	5.6	10.0	14.1	16.7	0.0
Mainframe computer	45.8	55.6	30.0	3.3	0.0	10.0	50.9	44.4	60.0
Mini-computer	59.3	44.4	60.0	6.6	11.1	0.0	34.1	44.4	40.0
Electronic mail - private	38.0	33.3	40.0	17.1	16.7	10.0	44.9	50.0	50.0
Electronic mail - public	7.2	11.1	0.0	10.8	5.6	0.0	82.0	83.3	100.0
Voice mail	4.5	5.6	0.0	8.1	11.1	0.0	87.4	83.3	100.0
Video conferencing	0.3	0.0	10.0	3.9	0.0	0.0	95.8	100.0	90.0
Facsimile	93.1	100.0	90.0	4.5	0.0	0.0	2.4	0.0	10.0
Desktop publishing	32.6	38.9	10.0	19.5	11.1	20.0	47.9	50.0	70.0
External databases	25.7	5.6	20.0	12.0	5.6	10.0	62.3	88.9	70.0
Telex	33.5	38.9	60.0	0.3	0.0	0.0	66.2	61.1	40.0
Local area networks	38.9	38.9	40.0	22.2	22.2	0.0	38.9	38.9	60.0
Wide area networks	27.8	55.6	40.0	12.0	5.6	10.0	60.2	38.9	50.0
Electronic data interchange	18.3	38.9	30.3	21.9	22.2	40.0	59.9	38.9	30.3
Mobile data communications	22.2	16.7	0.0	8.7	5.6	10.0	69.2	77.8	90.0
Satellite data distribution	4.2	0.0	0.0	5.4	11.1	10.0	90.4	88.9	90.0
Human resource management systems	44.0	38.9	20.0	16.8	11.1	20.0	39.2	50.0	60.0
Computerized order entry	42.8	55.6	30.0	12.9	5.6	10.0	44.3	38.9	60.0
Computerized inventory control	52.7	55.6	30.0	16.2	22.2	10.0	31.1	22.2	60.0
Expert systems for decision support tool	12.3	16.7	10.0	15.0	11.1	0.0	72.8	72.2	90.0
Computerized financial systems	90.4	94.4	80.0	4.2	0.0	20.0	5.4	5.6	0.0
Electronic scanning systems	16.8	27.8	10.0	17.1	5.6	10.0	66.2	66.7	80.0
Computer assisted education and training	26.0	33.3	20.0	11.7	5.6	0.0	62.3	61.1	80.0
Electronic funds transfer	14.1	22.2	0.0	11.4	5.6	10.0	74.6	72.2	90.0
Automatic teller machines									
Transportation systems	50.9	66.7	50.0	11.4	0.0	20.0	37.7	33.3	30.0
Computer reservation systems	17.1	11.1	10.0	3.6	5.6	0.0	79.3	83.3	90.0
Automated storage and retrieval systems	12.9	5.6	20.0	4.8	0.0	0.0	82.3	94.4	80.0
Point of sale terminals	9.9	16.7	0.0	5.4	0.0	0.0	84.7	83.3	100.0
Smart cards	•								
Computer-aided design (CAD)	20.7	11.1	0.0	9.3	0.0	10.0	70.1	88.9	90.0
Computer-aided engineering (CASE)	9.9	11.1	0.0	9.6	0.0	10.0	80.5	88.9	90.0
Computer-aided software engineering (CASE)		0.0	0.0	13.8	16.7	20.0	77.8	83.3	80.0
In-room management systems									
In-room video systems	•	•	·	<u> </u>		•	•		<u> </u>
In-room check out systems	•	•	•	<u>-</u>	•	•	<u> </u>	-	
Property management systems			10.0	5.7	5.6	10	84.4	94.4	80.0
Eicharth illeriafariailt sharaile	9.9	0.0	10.0	5.7	5.6	10.	04.4	94.4	00.0

Communications

	CURRENTLY USED IN OPERATIONS				O USE IN NEX	T 3 YDS	DON'T PLAN TO USE IN NEXT 3 YRS		
	CONNENT		LIVILOTO	PLANT!		. 3 1173			
	Canada	Ownership USA	Other	Canada	Ownership USA	Other	Canada	Ownership USA	Other
	Carrida %	₩ %	√ules	Valleus %	95 75	%.	%	- USA - %	%
Personal computers	100.0	100.0	3	0.0	0.0		0.0	0.0	
Online terminals	90.7	100.0		0.0	0.0		9.3	0.0	
Mainframe computer	48.0	75.0		1.3	0.0		50.7	25.0	
Mini-computer	65.3	100.0		2.7	0.0		32.0	0.0	
Electronic mail - private	41.3	100.0		28.0	0.0		30.7	0.0	
Electronic mail - public	34.7	75.0		8.0	0.0		57.3	25.0	
Voice mail	16.0	50.0		12.0	25.0		72.0	25.0	
Video conferencing	13.3	0.0		13.3	75.0		73.3	25.0	
Facsimile .	98.7	100.0		0.0	0.0		1.3	0.0	
Desktop publishing	50.7	50.0		21.3	0.0		28.0	50.0	
External databases	41.3	75.0		10.7	0.0		48.0	25.0	
Telex	49.3	50.0		4.0	0.0		46.7	50.0	
Local area networks	58.7	100.0		20.0	0.0		21.3	0.0	
Wide area networks	37.3	75.0		16.0	25.0		46.7	0.0	
Electronic data interchange	18.7	50:0		20.0	0.0		61.3	50.0	
Mobile data communications	30.7	50.0		13.3	25.0		56.0	25.0	
Satellite data distribution	14.7	25.0		14.7	50.0		70.7	25.0	
Human resource management systems	58.7	75.0		20.0	25.0		21.3	0.0	
Computerized order entry	65.3	75.0		8.0	25.0		26.7	0.0	
Computerized inventory control	70.7	50.0		8.0	25.0		21.3	25.0	
Expert systems for decision support tool	10.7	0.0		14.7	25.0		74.7	75.0	
Computerized financial systems	93.3	100.0		0.0	0,0		6.7	0.0	
Electronic scanning systems	24.0	25.0		20.0	50.0		56.0	25.0	
Computer assisted education and training	29.3	75.0		21.3	25.0		49.3	0.0	
Electronic funds transfer	18.7	75.0		6.7	0.0		74.7	25.0	
Automatic teller machines									
Transportation systems	2.7	50.0		0.0	0.0		97.3	50.0	
Computer reservation systems	4.0	0.0		1.3	25.0		94.7	75.0	
Automated storage and retrieval systems	10.7	0.0		8.0	0.0		81.3	100.0	
Point of sale terminals	13.3	25.0		8.0	25.0		78.7	50.0	
Smart cards		•							
Computer-aided design (CAD)	56.0	50.0		4.0	0.0		40.0	50.0	
Computer-aided engineering (CASE)	21.3	25.0		12.0	0.0		66.7	75.0	
Computer-aided software engineering (CASE)		25.0		13.3	0.0		76.0	75.0	
In-room management systems								<u> </u>	
In-room video systems									
In-room check out systems	•	•		•					
Property management systems	8.0	0.0		5.3	0.0		86.7	100.0	

Table 12-3

Wholesale Trade Industries

	CURRENTLY USED IN OPERATIONS				O USE IN NEX		DON'T PLAN TO USE IN NEXT 3 YRS			
	CONTRACT	Ownership	~ 1011 PO 140	1041	Ownership	1100	DOM TILA	Ownership		
	Canada	USA	Other	Canada	USA	Other	Canada	USA	Other	
	*	%	%	%	%	%	%	*	*	
Personal computers	89.0	99.0	96.6	4.1	0.0	0.0	6.9	1.0	3.4	
Online terminals	83.5	91.3	90.8	4.1	0.0	0.0	12.3	8.7	9.2	
Mainframe computer	44.2	48.5	43.7	2.4	1.0	0.0	53.5	50.5	56.3	
Mini-computer	61.7	64.1	63.2	2.8	1.9	2.3	35.5	34.0	34.5	
Electronic mail - private	26.8	47.6	40.2	12.8	11.7	10.3	60.4	40.8	49.4	
Electronic mail - public	11.0	16.5	13.8	7.8	9.7	9.2	81.2	73.8	77.0	
Voice mail	2.4	14.6	6.9	5.2	7.8	8.0	92.4	77.7	85.1	
Video conferencing	2.2	2.9	0.0	3.5	9.7	4.6	94.4	87.4	95.4	
Facsimile	95.2	95.1	97.7	0.9	1.0	0.0	3.9	3.9	2.3	
Desktop publishing	26.2	43.7	39.1	16.2	14.6	16.1	57.6	41.7	44.8	
External databases	15.2	24.3	18.4	10.4	5.8	6.9	74.5	69.9	74.7	
Telex	43.1	59.2	69.0	0.0	0.0	0,0	56.9	40.8	31.0	
Local area networks	40.9	40.8	36.8	15.4	16.5	18.4	43.7	42.7	44.8	
Wide area networks	35.1	36.9	29.9	9.5	7.8	5.7	55.4	55.3	64.4	
Electronic data interchange	23.8	26.2	28.7	22.3	28.2	21.8	53.9	45.6	49.4	
Mobile data communications	11.7	10.7	14.9	6.5	8.7	4.6	81.8	80.6	80.5	
Satellite data distribution	3.0	7.8	4.6	4.5	8.7	4.6	92.4	83.5	90.8	
Human resource management systems	26.4	41.7	37.9	15.6	18.4	13.8	58.0	39.8	48.3	
Computerized order entry	82.5	90.3	89.7	6.7	2.9	4.6	10.8	6.8	5.7	
Computerized inventory control	83.3	93.2	87.4	9.1	1.9	5.7	7.6	4.9	6.9	
Expert systems for decision support tool	14.1	19.4	12.6	10.8	11.7	9.2	75.1	68.9	78.2	
Computerized financial systems	90.7	93,2	93.1	3.2	1.9	1.1	6.1	4.9	5.7	
Electronic scanning systems	14.9	10.7	17.2	19.7	18.4	14.9	65.4	70.9	67.8	
Computer assisted education and training	20.1	33.0	19.5	10.2	11.7	9.2	69.7	55.3	71.3	
Electronic funds transfer	14.5	19.4	19.5	7.8	11.7	8.0	77.7	68.9	72.4	
Automatic teller machines		•	•							
Transportation systems	13.2	14.6	8.0	6.5	3.9	4.6	80.3	81.6	87.4	
Computer reservation systems	1.9	2.9	4.6	1.3	0.0	2.3	96.8	97.1	93.1	
Automated storage and retrieval systems	9.1	14.6	12.6	5.0	9.7	5.7	85.9	75.7	81.6	
Point of sale terminals	22.1	16.5	6.9	10.4	6.8	3.4	67.5	76.7	89.7	
Smart cards			•		•			•	•	
Computer-aided design (CAD)	11.0	25.2	20.7	5.4	5.8	4.6	83.5	68.9	74.7	
Computer-aided engineering (CASE)	4.3	3.6	9.2	2.4	7.8	4.6	93.3	78.6	86.2	
Computer-aided software engineering (CASE)		14.6	5.7	6.7	14.6	8.0	88.3	70.9	86.2	
In-room management systems		,		•	•	•				
In-room video systems				•					, ,	
In-room check out systems										
Property management systems	4.3	3.9	3.4	2.4	1.9	0.0.	93.3	94.2	96.6	

Retail Trade Industries

<u> Reidii IIdde II</u>				777700				
CURRENT	ILY USED IN OF	ERATIONS	PLAN T	O USE IN NEX	T 3 YRS	DON'T PLAN TO USE IN NEXT 3 YRS		
	Ownership			Ownership		Ownership		
Canada	USA	Other	Canada	USA	Other	Canada	USA	Other
1			1		3	1		*
 			 	 			 	0.0
 	 		 	 			 	27.3
 			 		 	!		27.3
						 	 	45.5
 		 	+		 			45.5
 		 	+	 		 	 	72.7
 			+	·		 	 	90.9
 					 	 		100.0
		 	 			 	}	0.0
17.9	30.6	9.1	+		36.4	73.3	58.3	54.5
9.3	8,3	18.2	8.4	5.6	9.1	82.3	86.1	72.7
16.2	30.6	63.6	0.2	0.0	0.0	83.6	69.4	36.4
31.4	41.7	54.5	12.6	19.4	18.2	56.0	38.9	27.3
21.1	38.9	18.2	6.5	8.3	9.1	72.4	52.8	72.7
15.6	13.9	18.2	11.2	16.7	45.5	73.3	69.4	36.4
6.9	5.6	0.0	1,3	5.6	18.2	91.8	88.9	81.8
, 2.1	0.0	0.0	3.4	8.3 ·	0.0	94.5	91.7	100.0
21.7	38.9	36.4	12.6	5.6	27.3	65.7	55.6	36.4
60.6	66.7	81.8	9,3	11.1	0.0	30.1	22.2	18.2
65.1	75.0	90.9	11.8	11.1	9.1	23,2	13.9	0.0
10.1	22.2	9.1	6.7	16.7	18.2	83.2	61.1	72.7
82.7	88.9	100.0	4.2	0.0	0.0	13.1	11.1	0.0
22,3	19.4	36.4	14.7	11.1	18.2	62.9	69.4	45.5
13.7	22.2	9.1	6.7	5.6	18.2	79.6	72.2	72.7
16.4	30.6	18.2	9.5	5.6	9.1	74.1	63.9	72.7
				•	•			
4.6	16.7	0.0	2.1	0.0	0.0	93.3	83.3	100.0
2.9	2.8	9.1	0.8	0.0	0.0	96.2	97.2	90.9
7.4	8.3	0.0	2.3	0.0	27.3	90.3	91.7	72.7
						41.1	38.9	27.3
5.1	22.2	27.3	1.9		18.2	93.1		54.5
0.8			0.8	0.0	9.1	98.3	83.3	90.9
1.9	5.6	0.0	2,3	8.3	0.0	95.8	86.1	100.0
			1					
								90.9
	CURRENT Canada % 82.9 65.9 37.7 47.6 20.8 5.3 4.2 1.9 79.8 17.9 9.3 16.2 31.4 21.1 15.6 6.9 2.1 21.7 60.6 65.1 10.1 82.7 22.3 13.7 16.4 4.6 2.9 7.4 46.7 . 5.1 0.8	CURRENTLY USED IN OF Ownership Canada USA % % 82.9 88.9 65.9 75.0 37.7 38.9 47.6 38.9 20.8 38.9 5.3 16.7 4.2 11.1 1.9 0.0 79.8 86.1 17.9 30.6 9.3 8.3 16.2 30.6 31.4 41.7 21.1 38.9 15.6 13.9 6.9 5.6 2.1 0.0 21.7 38.9 60.6 66.7 65.1 75.0 10.1 22.2 82.7 88.9 22.3 19.4 13.7 22.2 16.4 30.6	CURRENTLY USED IN OPERATIONS Ownership Caneda USA Other % % % 82.9 88.9 90.9 2 65.9 75.0 72.7 37.7 38.9 63.6 47.6 38.9 45.5 20.8 38.9 36.4 5.3 16.7 18.2 4.2 11.1 0.0 1.9 0.0 0.0 79.8 86.1 100.0 17.9 30.6 9.1 9.3 8.3 18.2 16.2 30.6 63.6 31.4 41.7 54.5 21.1 38.9 18.2 15.6 13.9 18.2 15.6 13.9 18.2 6.9 5.6 0.0 2.1 38.9 36.4 60.6 66.7 81.8 65.1 75.0 90.9 10.1	CURRENTLY USED N OPERATIONS	CURRENTLY USED N OPERATIONS	CURRENTLY USED N OPERATIONS	CURRENTLY USED N OPERATIONS	CURRENTLY USED N OPERATIONS

Finance and Insurance Industries

			moun						
	CURREN	TLY USED IN C	PERATIONS	PLAN T	O USE IN NEX	T 3 YRS	DON'T PLA	N TO USE IN I	NEXT 3 YRS
		Ownership			Ownership			Ownership	
	Canada	USA	Other	Canada	USA	Other	Canada	USA	Other
Personal computers	94.3	96.4	100.0	1.7	0.0	0.0	4.0	3.6	0.0
Online terminals	92.0	100.0	92.6			0.0	7.4		
Mainframe computer			-	0.6	0.0			0.0	7.4
Mini-computer	65.3	67.9	74.1	2.3	0.0	0.0	32.4	32.1	25.9
	56.3	42.9	40.7	5.7	7.1	3.7	38.1	50.0	55.6
Electronic mail - private	49.4	53.6	66.7	19.9	17.9	11.1	30.7	28.6	22.2
Electronic mail - public	14.2	7.1	18.5	13.6	14.3	3.7	72.2	78.6	77.8
Voice mail	8.0	21.4	3.7	15.9	10.7	18.5	76.1	67.9	77.8
Video conferencing	3.4	0.0	3.7	9.1	3.6	11.1	87.5	96.4	85.2
Facsimile	93.2	100.0	96.3	1.7	0.0	3.7	5.1	0.0	0.0
Desktop publishing	50.0	46.4	55.6	21.0	17.9	11.1	29.0	35.7	33.3
External databases	48.9	39.3	51.9	9.1	7.1	3.7	42.0	53.6	44.4
Telex	40.3	42.9	74.1	0.6	0.0	0.0	59.1	57.1	25.9
Local area networks	57.4	50.0	48.1	21.0	17.9	37.0	21.6	32.1	14.8
Wide area networks	48.3	53.6	44.4	14.8	14.3	18.5	36.9	32.1	37.0
Electronic data interchange	31.8	25.0	22.2	13.1	17.9	14.8	55.1	57.1	63.0
Mobile data communications	7.4	3.6	3.7	5.1	3.6	0.0	87.5	92.9	96.3
Satellite data distribution	6.3	0.0	0.0	4.5	7.1	0.0	89.2	92.9	100.0
Human resource management systems	51.7	64.3	51.9	18.2	14.3	7.4	30.1	21.4	40.7
Computerized order entry	30.7	32.1	11.1	8.5	0.0	0.0	60.8	67.9	88.9
Computerized inventory control	38.1	35.7	14.8	14.8	0.0	7.4	47.2	64.3	77.8
Expert systems for decision support tool	10.8	21.4	0.0	30.7	21.4	29.6	58.5	57.1	70.4
Computerized financial systems	89.2	89.3	100.0	4.0	0.0	0.0	6.8	10.7	0.0
Electronic scanning systems	13.1	28.6	11.1	11.9	10,7	22.2	75.0	60.7	66.7
Computer assisted education and training	35.8	50,0	29.6	19.3	14.3	18.5	44.9	35.7	51.9
Electronic funds transfer	39.8	35.7	55.6	13.1	14.3	7.4	47.2	50.0	37.0
Automatic teller machines	21.0	0.0	3.7	5.7	7.1	3.7	73.3	92.9	92,6
Transportation systems	2.8	7.1	3.7	1.7	0.0	0.0	95.5	92.9	96.3
Computer reservation systems	2.8	3.6	0.0	1.1	0.0	3.7	96.0	96.4	96.3
Automated storage and retrieval systems	12.5	21.4	0.0	5.7	7.1	11.1	81.8	71.4	88.9
Point of sale terminals	6.8	10.7	3.7	14.8	3.6	3.7	78.4	85.7	92.6
Smart cards	0.6	0.0	0.0	11.9	7.1	7.4	87.5	92.9	92.6
Computer-aided design (CAD)	9.7	10.7	11.1	5.1	7.1	3.7	85.2	82.1	85.2
Computer-aided engineering (CASE)	3.4		0.0			0.0	94.9	96.4	100.0
Computer-aided software engineering (CASE)		0.0		1.7	3.6				
In-room management systems	11.4	14.3	14.8	19.9	21.4	18.5	68.8	64.3	66.7
	•		· ·			•	•	•	•
In-room video systems	•	•	·	•	•		•	•	· · ·
In-room check out systems	•	•		· ·			· · ·		
Property management systems	10.8	7.1	11.1.	7.4	0.0	0.0	81.8	92.9	88.9

USE OF TECHNOLOGY BY OWNERSHIP
Real Estate Operator and Insurance Agents

Real Estate Operator at		or ar		, (1, (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1						
	CURRENT	ILY USED IN OP	ERATIONS	PLAN T	O USE IN NEX	T 3 YRS	DON'T PLA	T PLAN TO USE IN NEXT 3 YRS		
		Ownership			Ownership			Ownership		
	Canada	USA	Other	Canada	USA	Other	Canada	USA	Other	
Personal computers	91.5	100.0	85.7 2	2.5	0.0	0.0	5.9	0.0	14.3	
Online terminals	84.7	100.0	71.4	0.8	0.0	0.0	14.4	0.0	28.6	
Mainframe computer	33.1	40.0	57.1	0.8	0.0	0.0	66.1	60.0	42.9	
Mini-computer	55.1	60.0	14.3	6.8	0.0	0.0	38.1	40.0	85.7	
Electronic mail - private	30.5	50.0	28.6	16.9	20.0	14.3	52.5	30.0	57.1	
Electronic mail - public	5.9	10.0	0.0	8.5	20.0	14.3	85.6	70.0	85.7	
Voice mail	2.5	30.0	14.3	10.2	20.0	0.0	87.3	50.0	85.7	
Video conferencing	0.8	0.0	0.0	4.2	0.0	0.0	94.9	100.0	100.0	
Facsimile	94.1	100.0	85.7	0.8	0.0	0.0	5.1	0.0	14.3	
Desktop publishing					30.0		47.5	20.0	57.1	
External databases	32.2	50.0	42.9	20.3		0.0	66.9	50.0	57.1	
Telex	28.0	40.0	28.6	5.1	10.0	14.3		70.0	57.1	
Local area networks	23.7	30.0	42.9	0.0	10.0	0.0	76.3 39.0	60.0	57.1	
Wide area networks	45.8	30.0	28.6	15.3		14.3		60.0	71.4	
Electronic data interchange	24.6	40.0	28.6	8.5	0.0	0.0	66.9 75.4	60.0	71.4	
Mobile data communications	12.7	30.0	28.6	11.9	10.0	0.0			85.7	
Satellile data distribution	9.3	0.0	14.3	5.1 2.5	10.0 0.0	0.0 0.0	85.6 96.6	90.0	100.0	
Human resource management systems	0.8	0.0	0.0	· · · · · · · · · · · · · · · · · · ·				100.0		
Computerized order entry	31.4	60.0	28.6	16.1	20.0	14.3	52.5	20.0	57.1 100.0	
Computerized inventory control	25.4 28.0	20.0	0.0	9.3 14.4	10.0 20.0	0.0	65.3 57.6	70.0 50.0	71.4	
Expert systems for decision support tool		30.0	28.6							
Computerized financial systems	17.8	0.0	0.0	9.3	20.0	0.0	72.9	80.0	100.0	
Electronic scanning systems	91.5	90.0	71.4	1.7	10.0	0.0	6.8	0.0	28.6	
Computer assisted education and training	5.9	0.0	14.3	12.7	0.0	0.0	81.4	100.0	85.7	
	17.8	40.0	28.6	16.9	20.0	0.0	65.3	40.0	71.4	
Electronic funds transfer	20.3	40.0	42.9	8.5	0.0	0.0	71.2	60.0	57.1	
Automatic teller machines Transportation systems			•		•				100.0	
Computer reservation systems	0.8	0.0	0.0	0.8	0.0	0.0	98.3	100.0	100.0	
	8.5	0.0	14.3	0.8	0.0	0.0	90.7	100.0	85.7	
Automated storage and retrieval systems	10.2	0.0	14.3	5.1	10.0	0.0	84.7	90.0	85.7	
Point of sale terminals	5.9	10.0	14.3	3.4	10.0	0.0	90.7	80.0	85.7	
Smart cards Computer eided design (CAD)			<u>.</u>	•						
Computer-aided design (CAD)	11.9	0.0	0.0	9.3	0.0	0.0	78.8	100.0	100.0	
Computer-aided engineering (CASE)	3.4	0,0	0.0	5,9	0.0	0.0	90.7	100.0	100.0	
Computer-aided software engineering (CASE)	2.5	0.0	0,0	10.2	10.0	0.0	87.3	90.0	100.0	
In-room management systems	•	•	·		•	•		•	<u> </u>	
In-room video systems	•	•		· · ·	· ·	•		•	· -	
In-room check out systems	•	•	•	•	•	•	•	•		
Property management systems	45.8	10.0	42.9	3.4	10.0	0.0	50.8	80.0	57.1	

Business Service Industries

	· · · · · · · · · · · · · · · · · · ·	TLY USED IN OF			O USE IN NEX		DON'T PLA	PLAN TO USE IN NEXT 3 YRS			
	OGINIEN	Ownership	LIVILOIN	1541	Ownership			Ownership			
	Canada	USA	Other	Canada	USA	Other	Canada	USA	Other		
	*	- %	*	*	*	*		- %	%		
Personal computers	91.4	100.0	100.0	2.2	0.0	0.0	6.5	0.0	0.0		
Online terminals	69.5	79.4	91.7	7.1	0.0	0.0	23.4	20.6	8.3		
Mainframe computer	33.8	44.1	50.0	2.5	0.0	8.3	63.7	55.9	41.7		
Mini-computer	59.1	52.9	66.7	4.3	5.9	0.0	36.6	41.2	33.3		
Electronic mail - private	29.2	44.1	50.0	20.3	11.8	8.3	50.5	44.1	41.7		
Electronic mail - public	13.2	20.6	33.3	14.2	2.9	16.7	72.6	76.5	50.0		
Voice mail	7.7	2.9	8.3	11.7	11.8	8.3	80.6	85.3	83.3		
Video conferencing	3.4	2.9	8.3	8.9	2.9	0.0	87.7	94.1	91.7		
Facsimile	88.0	100.0	100.0	2.8	0.0	0.0	9.2	0.0	0.0		
Desktop publishing	34.5	55.9	50.0	16.0	17.6	0.0	49.5	26.5	50.0		
External databases	37,8	41,2	41.7	7.4	0.0	8.3	54.8	58.8	50.0		
Telex	38.8	44.1	41.7	0.6	2.9	0.0	60.6	52.9	58.3		
Local area networks	48,9	58.8	91.7	17.2	11.8	8.3	33.8	29.4	0.0		
Wide area networks	27.1	50,0	50.0	13.2	8.8	16.7	59.7	41.2	33.3		
Electronic data interchange	16.9	32.4	33.3	14.8	5.9	0.0	68.3	61.8	66.7		
Mobile data communications	7.4	14.7	16.7	5.5	5.9	25.0	87.1	79.4	58.3		
Satellite data distribution	2.5	5.9	0.0	4.6	8.8	16.7	92.9	85.3	83.3		
Human resource management systems	36.9	55.9	33.3	19.1	5.9	25.0	44.0	38.2	41.7		
Computerized order entry	22.5	61.8	33.3	9.2	8.8	16.7	68.3	29.4	50.0		
Computerized inventory control	24.6	55.9	50.0	10.2	5.9	16.7	65.2	38.2	33.3		
Expert systems for decision support tool	12.6	8.8	25.0	18.5	20.6	0.0	68.9	70.6	75.0		
Computerized financial systems	89.5	88.2	91.7	4.0	0.0	8,3	6.5	11.8	0.0		
Electronic scanning systems	12.9	20.6	16.7	13.2	23.5	16.7	73.8	55.9	66.7		
Computer assisted education and training	27.4	29.4	25.0	13.2	11.8	16.7	59.4	58.8	58.3		
Electronic funds transfer	14.2	20.6	33.3	7.4	5.9	0.0	78.5	73.5	66.7		
Automatic teller machines			,								
Transportation systems	5.2	5.9	8.3	3.4	2.9	0.0	91.4	91.2	91.7		
Computer reservation systems	3.4	2.9	0.0	2.5	0.0	0.0	94.2	97.1	100.0		
Automated storage and retrieval systems	9.2	17.6	25.0	3.4	5.9	8.3	87.4	76.5	66.7		
Point of sale terminals	1.8	5.9	0.0	2.8	8.8	0.0	95.4	85.3	100.0		
Smart cards											
Computer-aided design (CAD)	22.8	20.6	25.0	1.5	8.8	8.3	75.7	70.6	66.7		
Computer-aided engineering (CASE)	14.2	11.8	16.7	2.8	5.9	0.0	83.1	82.4	83.3		
Computer-aided software engineering (CASE)	11.4	11.8	25.0	8.9	11.8	0.0	79.7	76.5	75.0		
In-room management systems											
In-room video systems	•				•	· · · · · · · · · · · · · · · · · · ·					
In-room check out systems	•	•	•	*	· · · ·	· · · · · · · · · · · · · · · · · · ·	•				
Property management systems	4.3	2.9	8.3	2.8	2.9	0.0	92.9	94.1	91.7		

USE OF TECHNOLOGY BY OWNERSHIP Accomodation, Food and Beverage Service Industries

ACCOMOGNION	f	ILY USED IN OF			O USE IN NEX		DON'T PLAN TO USE IN NEXT 3 YRS		
		Ownership			Ownership			Ownership	
	Canada	USA	Other	Canada	USA	Other	Canada	USA	Other
Demonstrate and the second sec	70.4	% 04.7	×	*	- %	<u>*</u>	*	*	*
Personal computers	78.4	94.7	94.7	7.0	5.3	5.3	14.6	0.0	0.0
Online terminals	50.3	63.2	78.9	5.8	5.3	5.3	43.9	31.6	15.8
Mainframe computer	22.0	36.8	36.8	2.4	15.8	5.3	75.6	47.4	57.9
Mini-computer	39.3	42.1	52.6	4.0	0.0	10.5	56.7	57.9	36.8
Electronic mail - private	11.0	15.8	15.8	8.2	10.5	10.5	80.8	73.7	73.7
Electronic mail - public	2.4	5.3	5.3	4.3	10.5	15.8	93,3	84.2	78.9
Voice mail	2.1	5.3	21,1	2.4	10.5	5.3	95.4	84.2	73.7
Video conferencing	0.3	0.0	0.0	2.7	5.3	5.3	97.0	94.7	94.7
Facsimile	75.0	78.9	100.0	7.9	0.0	0.0	17.1	21.1	0.0
Desktop publishing	17.1	26.3	26.3	11.0	10.5	26.3	72.0	63.2	47.4
External databases	8.5	26.3	10.5	4.6	5.3	10.5	86.9	68.4	78.9
Telex	27.7	26.3	68.4	0.3	0.0	0.0	72.0	73.7	31.6
Local area networks	23.5	21.1	36.8	13.4	31.6	10.5	63.1	47.4	52.6
Wide area networks	11.0	36.8	21.1	7.9	21.1	15.8	81.1	42.1	63.2
Electronic data interchange	6.4	36.8	21.1	6.1	5,3	15.8	87.5	57.9	63.2
Mobile data communications	5.5	5.3	15.8	0.3	0.0	5.3	94.2	94.7	78.9
Satellite data distribution	1.2	0.0	10.5	1.2	0.0	5.3	97.6	100.0	84.2
Human resource management systems	18.9	31.6	36.8	14.6	15.8	21.1	66.5	52.6	42,1
Computerized order entry	21.6	21.1	36.8	12.2	10.5	15.8	66.2	68.4	47.4
Computerized inventory control	41.5	57.9	68.4	18.3	10.5	5.3	40.2	31.6	26.3
Expert systems for decision support tool	7.0	26.3	21.1	6.7	5.3	0.0	86.3	68.4	78.9
Computerized financial systems	79.0	63.2	100.0	6.1	10.5	0.0	14.9	26.3	0.0
Electronic scanning systems	2.1	0.0	0.0	4.3	5.3	15.8	93.6	94.7	84.2
Computer assisted education and training	11.9	21.1	21.1	8.8	5.3	5.3	79,3	73.7	73.7
Electronic funds transfer	9.5	15.8	10.5	7.3	10.5	21.1	83.2	73.7	68.4
Automatic teller machines		•			_				
Transportation systems	2.1	5.3	0.0	0.6	10.5	0.0	97.3	84.2	100.0
Computer reservation systems	32.0	15.8	78.9	7.0	0.0	0.0	61.0	84.2	21.1
Automated storage and retrieval systems	5.8	0.0	10.5	2.4	10.5	0.0	91.8	89.5	89.5
Point of sale terminals	42.4	36.8	68.4	8.2	10.5	10.5	49.4	52.6	21.1
Smart cards	78647	03.0		4.64					
Computer-aided design (CAD)	3.7	15.8	5.3	2.7	0.0	5.3	93.6	84.2	89.5
Computer-aided engineering (CASE)	0.9	0.0	5.3	0.6	0.0	10.5	98.5	100.0	84.2
Computer-aided software engineering (CASE)		0.0	10.5	0.9	0.0	10.5	97.0	100.0	78.9
In-room management systems	12.2	5.3	26.3	7.6	0.0	5.3	80.2	94.7	68.4
In-room video systems	19.5	0.0	26.3	5,2	0.0	10.5	75.3	100.0	63.2
In-room check out systems								94.7	63.2
Property management systems	6.4 18.3	5.3 21.1	21.1 31.6	10.7 8.2	0.0	15.8 15.8	82.9 73.5	78.9	52.6

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP

All Industries

			CURRENTLY USE	D IN OPERATIONS		
	Canadian	Ownership	USA O	vnership	Other O	wnership
	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200
Paragal samputan	%	*	*	*	<u> </u>	×
Personal computers	83.4	92.9 ,	96.6	97.0	95.7	97.5
Online terminals	68.6	79.5	82.1	88.9	85.1	91.1
Mainframe computer	32.1	48.7	44.4	51.9	40.4	59.5
Mini-computer	51.1	58.0	47.0	60.0	52.1	59.5
Electronic mail - private	21.2	35.5	31.6	54.8	33.0	51.9
Electronic mail - public	7.1	11.5	11.1	19.3	12.8	15.2
Voice mail	2.3	7.5	10.3	15.6	2.1	13.9
Video conferencing	1.8	2.5	0.9	2.2	3.2	0.0
Facsimile	84.2	91.9	92.3	96.3	95.7	98.7
Desktop publishing	22.0	35.7	34.2	49.6	29.8	46.8
External databases	15.2	29.9	17.1	34.1	20.2	30.4
Telex	28.0	37.5	49.6	43.0	68.1	63.3
Local area networks	33.3	46.7	35.9	49.6	33.0	55.7
Wide area networks	22.8	32.2	33.3	51.1	28.7	36.7
Electronic data interchange	14.6	21.4	28.2	26.7	24.5	29.1
Mobile data communications	9.7	12.3	7.7	11.9	11.7	11.4
Satellite data distribution	1.8	4.9	0.9	7.4	4.3	2.5
Human resource management systems	21.9	43.5	29.9	60.0	23.4	55.7
Computerized order entry	47.7	47.2	69.2	63.0	59.6	60.8
Computerized inventory control	52.8	55.5	68.4	72.6	64.9	67.1
Expert systems for decision support tool	10.1	13.5	14.5	20.7	11.7	11.4
Computerized financial systems	84.1	90.9	85.5	92.6	93.6	93.7
Electronic scanning systems	10.3	19.1	8.5	21.5	14.9	15.2
Computer assisted education and training	16.6	26.1	23.9	40.7	16.0	27.8
Electronic funds transfer	13.2	20.4	20.5	28.1	20.2	30.4
Automatic teller machines	0.9	2.5	0.0	0.0	0.0	1.3
Transportation systems	9.2	16.3	12.0	19.3	5.3	11.4
Computer reservation systems	7.7	11.3	3.4	5.2	9.6	16.5
Automated storage and retrieval systems	7.7	11.0	8.5	15.6	7.4	15.2
Point of sale terminals	21.5	25.1	16.2	23.0	8.5	25.3
Smart cards	0.1	0.0	0.0	0.0	0.0	0.0
Computer-aided design (CAD)	9.2	18.1	12.8	26.7	17.0	15.2
Computer-aided engineering (CASE)	4.0	7.9	5.1	15.6	5.3	7.6
Computer-aided software engineering (CASE)		9.0	5.1	14.8	6.4	10.1
In-room management systems	1.0	2.6	0.0	0.7	1.1	5.1
In-room video systems	1.6	4.2	0.0	0.0	0.0	6.3
In-room check out systems	0.4	1.5	0.0	0.7	1.1	3.8
Property management systems	7.0	12.8	1.7	8.9	4.3	16.5

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP

Transportation

		<u>ariopori</u>		D IN OPERATIONS		
	Canadian	Ownership	USA O	vnership	Other C	Mynership
	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200
December 1	*	*	*	*	*	*
Personal computers	87.3	94.4 ;	100.0	88.9	100.0	100.0
Online terminals	72.3	87.6	55.6	100.0	85.7	100.0
Mainframe computer	36.4	55.9	55.6	55.6	14.3	66.7
Mini-computer	52.0	67.1	33.3	55.6	57.1	66.7
Electronic mail - private	26.0	50.9	33.3	33.3	28.6	66.7
Electronic mail - public	6.4	8,1	11.1	11.1	0.0	0.0
Voice mail	1.7	7.5	11.1	0.0	0.0	0.0
Video conferencing	0.6	0.0	0.0	0.0	14.3	0.0
Facsimile	90.2	96.3	100.0	100.0	85.7	100.0
Desktop publishing	28.9	36.6	55.6	22.2	14.3	0.0
External databases	16.8	35.4	0.0	11.1	14.3	33.3
Telex	28.3	39,1	44.4	33.3	57.1	66.7
Local area networks	36.4	41.6	11.1	66.7	42.9	33.3
Wide area networks	22.5	33.5	55.6	55.6	28.6	66.7
Electronic data interchange	12.7	24.2	33.3	44.4	28.6	33.3
Mobile data communications	17.9	26.7	11.1	22.2	0.0	0.0
Satellite data distribution	1.7	6.8	0.0	0.0	0.0	0.0
Human resource management systems	31.2	57.8	33.3	44.4	14.3	33.3
Computerized order entry	34.1	52.2	44.4	66.7	0.0	100.0
Computerized inventory control	42.8	63.4	55.6	55.6	28.6	33.3
Expert systems for decision support tool	7.5	17.4	11.1	22.2	14.3	0.0
Computerized financial systems	87.9	93.2	88.9	100.0	85.7	66.7
Electronic scanning systems	11.0	23.0	11.1	44.4	14.3	0.0
Computer assisted education and training	19.7	32.9	33.3	33.3	14.3	33.3
Electronic funds transfer	13.3	14.9	33.3	11.1	0.0	0.0
Automatic teller machines	0.0	0.0	0.0	0.0	0.0	0.0
Transportation systems	35.8	67.1	55.6	77.8	42.9	66.7
Computer reservation systems	15.0	19.3	11.1	11.1	14.3	0,0
Automated storage and retrieval systems	11.0	14.9	0.0	11.1	14.3	33.3
Point of sale terminals	10.4	9.3	11.1	22.2	0.0	0.0
Smart cards	0.0	0.0	0.0	0.0	0.0	0.0
Computer-aided design (CAD)	15.0	26.7	0.0	22.2	0.0	0.0
Computer-aided engineering (CASE)	6.9	13.0	0.0	22.2	0.0	0.0
Computer-aided software engineering (CASE)	3.5	13.7	0.0	0.0	0.0	0.0
In-room management systems	0.0	0,0	0,0	0.0	0.0	0.0
In-room video systems	0.0	0.0	0.0	0.0	0.0	0.0
In-room check out systems	0.0	0.0	0.0	0.0	0.0	0.0
Property management systems	4.6	15.5	0.0	0.0	0.0	33.3

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP Communications

		<u> </u>	CURRENTLY USE) IN OPERATIONS		
	Canadian	Ownership	USA O	mership	Other O	wnership
	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200
Paranal against	400.0	400.0	*	400.0	*	*
Personal computers	100.0	100.0		100.0		
Online terminals	79.3	97.8		100.0		
Mainframe computer	51.7	45.7		75.0		
Mini-computer	44.8	78.3		100.0		
Electronic mail - private	34.5	45.7		100.0		
Electronic mail - public	24.1	41.3		75.0		
Voice mail	13.8	17.4		50.0		
Video conferencing	6.9	17.4		0.0		
Facsimile	96.6	100.0		100.0		
Desktop publishing	37.9	58.7		50.0		
External databases	17.2	56.5		75.0		
Telex	48.3	50.0		50.0		
Local area networks	41.4	69.6		100.0		
Wide area networks	31.0	41.3		75.0		
Electronic data interchange	6.9	26.1		50.0		
Mobile data communications	24.1	34.8		50.0		
Satellite data distribution	10.3	17.4		25.0		
Human resource management systems	27.6	78.3	-	75.0	•	
Computerized order entry	58.6	69.6		75.0		
Computerized inventory control	65.5	73.9		50.0		
Expert systems for decision support tool	10.3	10.9		0.0		
Computerized financial systems	89.7	95.7		100.0		
Electronic scanning systems	17.2	28.3		25.0		
Computer assisted education and training	24.1	32.6		75.0		
Electronic funds transfer	17.2	19.6		75.0		
Automatic teller machines	0.0	0.0		0.0		
Transportation systems	0.0	4.3		50.0		
Computer reservation systems	0.0	6.5		0.0		
Automated storage and retrieval systems	17.2	6.5		0.0		
Point of sale terminals	13.8	13.0		25.0		
Smart cards	0.0	0.0		0.0	<u> </u>	
Computer-aided design (CAD)	27.6	73.9		50.0		
Computer-aided engineering (CASE)		23.9		25.0		, , , , , , , , , , , , , , , , , , ,
Computer-aided software engineering (CASE)	17.2					
		13.0		25.0		
In-room management systems	0.0	0.0		0.0		
In-room video systems	0.0	0.0		0.0		
In-room check out systems	0.0	0.0		0.0		
Property management systems	3.4	10.9		0.0		

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP

Wholesale Trade Industries

	CURRENTLY USED IN OPERATIONS											
	Canadian	Ownership	USA O	vnership	Other O	wnership						
	# of amployees <200	# of employees >=200	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200						
	*	- %	*	*		%						
Personal computers	86.3	95.1 ,	98.4	100.0	94.7	100.0						
Online terminals	81.9	87.3	90.3	92.7	86.0	100.0						
Mainframe computer	38.4	57.0	45.2	53.7	35.1	60.0						
Mini-computer	62.2	60.6	62.9	65.9	59.6	70.0						
Electronic mail - private	20.6	40.8	40.3	58.5	31.6	56.7						
Electronic mail - public	9.1	15.5	14.5	19.5	14.0	13.3						
Voice mail	0.9	5.6	14.5	14.6	0.0	20.0						
Video conferencing	2.5	1.4	1.6	4.9	0.0	0.0						
Facsimile	94.4	97.2	93.5	97.6	98.2	96.7						
Desktop publishing	22.2	35.2	33.9	58.5	26.3	63.3						
External databases	12.2	21.8	17.7	34.1	17.5	20.0						
Telex	39.1	52.1	61.3	56.1	71.9	63.3						
Local area networks	36.6	50.7	41.9	39.0	29.8	50.0						
Wide area networks	32.5	40.8	32.3	43.9	28.1	33.3						
Electronic data interchange	18.4	35.9	30.6	19.5	24.6	36.7						
Mobile data communications	11.6	12.0	9.7	12.2	12.3	20.0						
Satellite data distribution	2.8	3.5	1.6	17.1	5.3	3.3						
Human resource management systems	21.3	38.0	32.3	56.1	22.8	66.7						
Computerized order entry	79.1	90.1	91.9	87.8	87.7	93.3						
Computerized inventory control	81.9	86.6	88.7	100.0	86.0	90.0						
Expert systems for decision support tool	13.8	14.8	16.1	24.4	14.0	10.0						
Computerized financial systems	88.4	95.8	93.5	92.7	93.0	93.3						
Electronic scanning systems	10.0	26.1	8.1	14.6	14.0	23,3						
Computer assisted education and training	16.6	28.2	29.0	39.0	14.0	30.0						
Electronic funds transfer	12.8	18.3	19.4	19.5	17.5	23.3						
Automatic teller machines	0.0	0.0	0.0	0.0	0.0	0.0						
Transportation systems	8.8	23.2	9.7	22.0	1.8	20.0						
Computer reservation systems	2.5	0.7	1.6	4.9	3.5	6.7						
Automated storage and retrieval systems	8.1	11.3	9.7	22.0	7.0	23.3						
Point of sale terminals	18.8	29.6	14.5	19.5	5.3	10.0						
Smart cards	0.0	0.0	0.0	0.0	0.0	0.0						
Computer-aided design (CAD)	9.4	14.8	17.7	36.6	21.1	20.0						
Computer-aided engineering (CASE)	3.1	7.0	8.1	22.0	8.8	10.0						
Computer-aided software engineering (CASE)	4.1	7.0	9.7	22.0	3.5	10.0						
In-room management systems	0.0	0.0	0.0	0.0	0.0	0.0						
In-room video systems	0.0	0.0	0.0	0.0	0.0	0.0						
In-room check out systems	0.0	0.0	0.0	0.0	0.0	0.0						
Property management systems						6.7						
Froperty management systems	3.1	7.0	1.6	7.3	1.8	5./						

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP

Retail Trade Industries

Reidii IIdde IIIddsiiies										
	CURRENTLY USED IN OPERATIONS									
		Ownership		vnership	Other Ownership # of employees <200 # of employees >==					
	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200				
Personal computers	79.4	88.8	86.7	90.5	100.0	88.9				
Online terminals	62.8	70.9	66.7	81.0	100.0	66.7				
Mainframe computer	32.4	46.4	40.0	38.1	100.0	55.6				
Mini-computer	43.9	53.6	6.7	61.9	0.0	55.6				
Electronic mail - private	18.9	24.0	13.3	57.1	0.0	44.4				
Electronic mail - public	4.7	6.1	0.0	28.6	0.0	22.2				
Voice mail	2.4	7.3	0.0	19.0	0.0	0.0				
Video conferencing	2.4	1.1	0.0	0.0	0.0	0.0				
Facsimile	74.3	88.8	80.0	90.5	100.0	100.0				
Desktop publishing	15.5	21.8	20.0	38.1	0.0	11.1				
External databases	8.4	10.6	6.7	9.5	0.0	22.2				
Telex	12.5	22.3	20.0	38.1	50.0	66.7				
Local area networks	. 26.4	39.7	26.7	52.4	50.0	55.6				
Wide area networks	21.6	20.1	46.7	33.3	50.0	11.1				
Electronic data interchange	17.2	12.8	20.0	9.5	50.0	11.1				
Mobile data communications	6.1	8.4	0.0	9.5	0.0	0.0				
Satellite data distribution	1.0	3.9	0.0	0.0	0.0	0.0				
Human resource management systems	· 17.9	27.9	20.0	52.4	0.0	44.4				
Computerized order entry	60.8	60.3	53.3	76.2	100.0	77.8				
Computerized inventory control	64.5	65.9	66.7	81.0	100.0	88.9				
Expert systems for decision support tool	9.8	10.6	20.0	23.8	0.0	11.1				
Computerized financial systems	81.4	84.9	80.0	95.2	100.0	100.0				
Electronic scanning systems	16.6	31.8	0.0	33.3	50.0	33.3				
Computer assisted education and training	12.5	15.6	13.3	28.6	0.0	11.1				
Electronic funds transfer	12.8	22.3	6.7	47.6	0.0	22.2				
Automatic teller machines	0.0	0.0	0.0	0.0	0.0	0.0				
Transportation systems	4.4	5.0	6.7	23.8	0.0	0.0				
Computer reservation systems	2.7	3.4	0.0	4.8	0.0	11.1				
Automated storage and retrieval systems	6.8	8.4	0.0	14.3	0.0	0.0				
Point of sale terminals	42.2	54.2	33.3	52.4	50.0	66.7				
Smart cards	0.0	0.0	0.0	0.0	0.0	0.0				
Computer-aided design (CAD)	2.0	10.1	13.3	28.6	0.0	33.3				
Computer-aided engineering (CASE)	0.3	1.7	6.7	23.8	0.0	0.0				
Computer-aided software engineering (CASE)	1.0	3.4	0.0	9.5	0.0	0.0				
in-room management systems	0.0	0.0	0.0	0.0	0.0	0.0				
In-room video systems	0.0	0.0	0.0	0,0	0.0	0.0				
In-room check out systems	0.0	0.0	0.0	0.0	0.0	0.0				
Property management systems	1.7	5.6	0.0	9.5	0.0	0.0				

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP Finance and Insurance Industries

71114	Findice and insulance mausines								
			<u> </u>	D IN OPERATIONS	<u> </u>				
		Ownership	USA Ownership # of employees <200 # of employees >=200			Wnership			
	% of employees <200	# or employees >=200	# or employees <200	# or employees >=200	# or employees <200	# or amployees >=200			
Personal computers	91.5	95.7	100.0	95.0	100.0	100.0			
Online terminals	89.8	93.2	100.0	100.0	86.7	100.0			
Mainframe computer	39.0	78.6	62.5	70.0	73.3	75.0			
Mini-computer	57.6	55.6	37.5	45.0	53.3	25.0			
Electronic mail - private	39.0	54.7	12.5	70.0	53.3	83.3			
Electronic mail - public	10.2	16.2	0.0	10.0	13.3	25.0			
Voice mail	3.4	10.3	12.5	25.0	6.7	0.0			
Video conferencing	1.7	4.3	0.0	0.0	6.7	0.0			
Facsimile	89.8	94.9	100.0	100.0	93.3	100.0			
Desktop publishing	32.2	59.0	50.0	45.0	53.3	58.3			
External databases	39.0	53.8	37.5	40.0	40.0	66.7			
Telex	37.3	41.9	62.5	35.0	80.0	66.7			
Local area networks	47.5	62.4	50.0	50.0	26.7	75.0			
Wide area networks	28.8	58.1	37.5	60.0	26.7	66.7			
Electronic data interchange	25.4	35.0	37.5	20.0	20.0	25.0			
Mobile data communications	10.2	6.0	0.0	5.0	6.7	0.0			
Satellite data distribution	3.4	7.7	0.0	0.0	0.0	0.0			
Human resource management systems	27.1	64.1	37.5	75.0	26.7	83.3			
Computerized order entry	22.0	35.0	37.5	30.0	6.7	16.7			
Computerized inventory control	16.9	48.7	0.0	50.0	6.7	25.0			
Expert systems for decision support tool	5.1	13.7	37.5	15.0	0.0	0.0			
Computerized financial systems	84.7	91.5	75.0	95.0	100.0	100.0			
Electronic scanning systems	6.8	16.2	25.0	30.0	13.3	8.3			
Computer assisted education and training	30.5	38.5	37.5	55.0	20.0	41.7			
Electronic funds transfer	33.9	42.7	25.0	40.0	53.3	58.3			
Automatic teller machines	18.6	22.2	0.0	0.0	0.0	8.3			
Transportation systems	1.7	3.4	12.5	5.0	6.7	0.0			
Computer reservation systems	3.4	2.6	0.0	5.0	0.0	0.0			
Automated storage and retrieval systems	6.8	15.4	37.5	15.0	0.0	0.0			
Point of sale terminals	3.4	8.5	12.5	10.0	0.0	8.3			
Smart cards	1.7	0.0	0.0	0.0	0.0	0.0			
Computer-aided design (CAD)	6.8	11.1	0.0	15.0	13.3	8.3			
Computer-aided engineering (CASE)	3.4	3.4	0.0	0.0	0.0	0.0			
Computer-aided software engineering (CASE)	5.1	14.5	0.0	20.0	20.0	8.3			
In-room management systems	0.0	0.0	0.0	0.0	0.0	0.0			
In-room video systems	0.0	0.0	0.0	0.0	0.0	0.0			
In-room check out systems	0.0	0.0	0.0	0.0	. 0.0	0.0			
Property management systems	6.8	12.8	0.0	10.0	6.7	16.7			

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP
Real Estate Operator and Insurance Agents Industries

Kedi Esidie Op				D IN OPERATIONS		
	Canadian	Ownership	USA O	vnership	Other O	wnership
		# of employees >=200		# of employees >=200	# of employees <200	# of employees >=200
Personal computers	85.3	100.0	100.0	100.0	75.0	100.0
Online terminals						100.0
Mainframe computer	77.9	94.0	100,0	100.0	50.0	100.0
	20.6	50.0	25.0	50.0	25.0	100.0
Mini-computer	54.4	56.0	100.0	33.3	25.0	0.0
Electronic mail - private	26.5	36.0	0.0	83.3	0.0	66.7
Electronic mail - public	4.4	8.0	0.0	16.7	0.0	0.0
Voice mail	2.9	2.0	0.0	50.0	0.0	33.3
Video conferencing	1.5	0.0	0.0	0.0	0.0	0.0
Facsimile	91.2	98.0	100.0	100.0	75.0	100.0
Desktop publishing	29.4	36.0	25.0	66.7	25.0	66.7
External databases	19.1	40.0	0.0	66.7	25.0	33.3
Telex	22.1	26.0	0.0	50.0	25.0	66.7
Local area networks	36.8	58.0	25.0	33.3	0.0	66.7
Wide area networks	17.6	34.0	25.0	50.0	25.0	33.3
Electronic data interchange	10.3	16.0	25.0	33.3	25.0	33.3
Mobile data communications	5.9	14.0	0.0	0.0	25.0	0.0
Satellite data distribution	0.0	2.0	0.0	0.0	0.0	0.0
Human resource management systems	26.5	38.0	25.0	83.3	25.0	33.3
Computerized order entry	27.9	22.0	0.0	33.3	0.0	0.0
Computerized inventory control	27.9	28.0	0.0	50.0	25.0	33.3
Expert systems for decision support tool	17.6	18.0	0.0	0.0	0.0	0.0
Computerized financial systems	91.2	92.0	75.0	100.0	75.0	66.7
Electronic scanning systems	2.9	10.0	0.0	0.0	0.0	33.3
Computer assisted education and training	10.3	28.0	0.0	66.7	25.0	33.3
Electronic funds transfer	20.6	20.0	50.0	33.3	25.0	66.7
Automatic teller machines	0.0	0.0	0.0	0.0	0.0	0.0
Transportation systems	1.5	0.0	0.0	0.0	0.0	0.0
Computer reservation systems	7.4	10.0	0.0	0.0	25.0	0.0
Automated storage and retrieval systems	7.4	14.0	0.0	0.0	25.0	0.0
Point of sale terminals	4.4	8.0	0.0	16.7	25.0	0.0
Smart cards	0.0	0.0	0,0	0.0	0.0	0.0
Computer-aided design (CAD)	11.8	12.0	0.0	0.0	0.0	0.0
Computer-aided engineering (CASE)	2.9	4.0	0.0	0.0	0.0	0.0
Computer-aided software engineering (CASE)		6.0	0.0	0.0	0.0	0.0
In-room management systems	0.0	0.0	0.0	0.0	0.0	0.0
In-room video systems	0.0	0.0	0.0	0.0	0.0	0.0
In-room check out systems	0.0	0.0	0.0	0.0	0.0	0.0
Property management systems	48.5	42.0	0.0	16.7	50.0	33.3

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP

Business Service Industries

			CURRENTLY USE	D IN OPERATIONS		
	Canadian	Ownership	USA O	wnership	Other Ownership	
	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200		# of employees >=200
Pameral computer	% 90.4	% 00.0	100.0	100.0	100.0	400.0
Personal computers	89.4	92.9 ,	100.0		100.0	100.0
Online terminals	64.8	73.2	76.9	81.0	100.0	87.5
Mainframe computer	26.8	39.3	38.5	47.6	50.0	50.0
Mini-computer	57.7	60.1	38.5	61.9	50.0	75.0
Electronic mail - private	25.4	32.2	46.2	42.9	75.0	37.5
Electronic mail - public	11.3	14.8	23.1	19.0	50.0	25.0
Voice mail	4.9	9.8	7.7	0.0	25.0	0.0
Video conferencing	1.4	4.9	0.0	4.8	25.0	0.0
Facsimile	85.9	89.6	100.0	100,0	100.0	100.0
Desktop publishing	27.5	39.9	46.2	61.9	50.0	50.0
External databases	35.2	39.9	38.5	42.9	25.0	50.0
Telex	35.9	41.0	53.8	38.1	50.0	37.5
Local area networks	44.4	52.5	46.2	66.7	100.0	87.5
Wide area networks	19.7	32.8	23.1	66.7	50.0	50.0
Electronic data interchange	16.2	17.5	23.1	38.1	25.0	37.5
Mobile data communications	7.0	7.7	15.4	14.3	25.0	12.5
Satellite data distribution	1.4	3.3	0.0	9.5	0.0	0.0
Human resource management systems	23.9	47.0	30.8	71.4	25.0	37.5
Computerized order entry	21.1	23.5	69.2	57.1	50.0	25.0
Computerized inventory control	20.4	27.9	53.8	57.1	50.0	50.0
Expert systems for decision support tool	11.3	13.7	0.0	14.3	25.0	25.0
Computerized financial systems	85.9	92.3	76.9	95.2	100.0	87.5
Electronic scanning systems	11.3	14.2	15.4	23.8	50.0	0.0
Computer assisted education and training	23.9	30.1	7.7	42.9	50.0	12.5
Electronic funds transfer	11.3	16.4	23.1	19.0	0.0	50.0
Automatic teller machines	0.0	0.0	0.0	0.0	0.0	0.0
Transportation systems	4.9	5.5	0.0	9.5	0.0	12.5
Computer reservation systems	2.1	4.4	0.0	4.8	0.0	0.0
Automated storage and retrieval systems	8.5	9.8	7.7	23.8	25.0	25.0
Point of sale terminals	1.4	2.2	7.7	4.8	0.0	0.0
Smart cards	0.0	0.0	0.0	0.0	0.0	0.0
Computer-aided design (CAD)	21.8	23.5	7.7	28.6	50.0	12.5
Computer-aided engineering (CASE)	12.7	15.3	0.0	19.0	0.0	25.0
Computer-aided software engineering (CASE)		13.1	0.0	19.0	0.0	37.5
In-room management systems	0.0	0.0	0.0	0.0	0.0	0.0
In-room video systems	0.0	0.0	0.0	0.0	0.0	0.0
In-room check out systems	0.0	0.0	0.0	0.0	0.0	0.0
Property management systems	3.5	4.9	0.0	4.8	0.0	12.5

USE OF TECHNOLOGY BY SIZE AND OWNERSHIP Accomodation, Food and Beverage Service Industries

Accomodanon		<u> </u>		D IN OPERATIONS		
	Canadian	Ownership	USA O	mership	Other O	wnership
		# of employees >=200	# of employees <200	# of employees >=200	# of employees <200	# of employees >=200
Personal computers	- % 	97.7	*	400.0	400.0	% 00.0
Online terminals	69.3	87.7	83.3	100.0	100.0	92.9
	39.2	61.7	50.0	69.2	80.0	78.6
Mainframe computer	18.1	25.9	33.3	38.5	20.0	42.9
Mini-computer	33.1	45.7	0.0	61.5	0.0	71.4
Electronic mail - private	7.2	14.8	0.0	23.1	0.0	21.4
Electronic mail - public	1.8	3.1	0.0	7.7	0.0	7.1
Voice mail	0.6	3.7	0.0	7.7	0.0	28.6
Video conferencing	0.6	0.0	0.0	0.0	0.0	0.0
Facsimile	67.5	82.7	66.7	84.6	100.0	100.0
Desktop publishing	12.0	22.2	0.0	38.5	20.0	28.6
External databases	3.6	13.6	0.0	38.5	0.0	14.3
Telex	22.9	32.7	16.7	30.8	60.0	71.4
Local area networks	18.7	28.4	0.0	30.8	40.0	35.7
Wide area networks	7.8	14.2	0.0	53.8	20.0	21.4
Electronic data Interchange	2.4	10.5	16.7	46.2	20.0	21.4
Mobile data communications	5.4	5.6	0.0	7.7	20.0	14.3
Satellite data distribution	0.0	2.5	0.0	0.0	20.0	7.1
Human resource management systems	13.9	24.1	16.7	38.5	40.0	35.7
Computerized order entry	16.3	27.2	0.0	30.8	20.0	42.9
Computerized inventory control	34.9	48.1	50.0	61.5	80.0	64.3
Expert systems for decision support tool	3.6	10.5	0.0	38.5	20.0	21.4
Computerized financial systems	71.1	87.0	50.0	69.2	100.0	100.0
Electronic scanning systems	1.2	3.1	0.0	0.0	0.0	0.0
Computer assisted education and training	10.8	13.0	16.7	23.1	0.0	28.6
Electronic funds transfer	4.8	14,2	16.7	15.4	0.0	14.3
Automatic teller machines	0.0	0.0	0.0	. 0.0	0.0	0.0
Transportation systems	1.8	2.5	16.7	0.0	0.0	0.0
Computer reservation systems	27.1	37.0	33.3	7.7	100.0	71.4
Automated storage and retrieval systems	3.6	8.0	0.0	0.0	0.0	14.3
Point of sale terminals	33.7	51.2	33.3	38.5	60.0	71.4
Smart cards	0.0	0.0	0.0	0.0	0.0	0.0
Computer-aided design (CAD)	1.2	6.2	16.7	15.4	0.0	7.1
Computer-aided engineering (CASE)	0.0	1.9	0.0	0.0	0.0	7.1
Computer-aided software engineering (CASE)		3.7	0.0	0.0	20.0	7.1
in-room management systems	7.8	16.7	0.0	7.7	20.0	28.6
In-room video systems	12.0	27.2	0.0	0.0	0.0	35.7
In-room check out systems	3.0	9.9	0.0	7.7	20.0	21.4
Property management systems	13.3	23.5	16.7	23.1	0.0	42,9

USE OF TECHNOLOGY BY REGION

Currently using

1.00	CURRENTLY USED IN OPERATIONS							
	REGION							
	Atlantic	Québec	Ontario	Prairies	B.C. & Terr.			
	<u> </u>	*	<u> </u>	*	*			
Personal computers	83.5	89.9	90.5	86.4	91.0			
Online terminals	66.5	71.8	80.6	71.1	78.4			
Mainframe computer	34.0	49.2	42.5	33.1	37.4			
Mini-computer	44.7	56.0	55.2	53.9	54.3			
Electronic mail - private	25.2	22.7	35.2	27.7	33.8			
Electronic mail - public	11.7	6.4	12.2	7.8	11.9			
Voice mail	2.9	3,5	8.2	3.4	6.1			
Video conferencing	1.5	2,7	2.1	2.5	0.4			
Facsimile	83.5	91.3	90.2	84.1	91.7			
Desktop publishing	23.3	25.8	32.8	26.8	39.9			
External databases	15.0	23.0	24.2	18.7	27.0			
Telex	25,7	40.8	37.7	28.1	39.2			
Local area networks	32.5	42.6	42.1	33.8	43.2			
Wide area networks	23.3	34.1	29.2	25.4	27.0			
Electronic data interchange	16.0	24.5	18.9	15.5	18.3			
Mobile data communications	13.1	5.7	11.6	14.0	11.5			
Satellite data distribution	1.0	2.0	4.4	2.7	4.3			
Human resource management systems	21.8	39.3	36.3	25.2	33.1			
Computerized order entry	38.3	51.2	54.0	46.3	47.8			
Computerized inventory control	53.4	56.0	59.4	53.0	53.6			
Expert systems for decision support tool	7.3	12.8	12.4	10.1	17.6			
Computerized financial systems	83.5	90.1	88.1	86.4	87.1			
Electronic scanning systems	11.7	13.3	15.9	13.6	14.7			
Computer assisted education and training	17.0	13,1	26.6	22.9	24.5			
Electronic funds transfer	13.6	10.1	23.4	16.4	16.9			
Automatic teller machines	0.5	2.0	0.6	1.7	3.2			
Transportation systems	12.6	10.6	13.8	12.6	10.8			
Computer reservation systems	8.7	9.1	8,5	8.8	12.6			
Automated storage and retrieval systems	9.7	2.7	12.6	9.6	12.6			
Point of sale terminals	27.2	18.8	22.4	24.1	23.4			
Smart cards	0.0	0.2	0.0	0.0	0.0			
Computer-aided design (CAD)	10.7	10.1	17.1	12.0	16.5			
Computer-aided engineering (CASE)	4.4	5.0	6.6	5.7	9.7			
Computer-aided software engineering (CASE)		5.2	7.5	4.2	10.4			
In-room management systems	1.5	3.0	0.9	1.3	2.9			
In-room video systems	4.9	2.9	1.3	3.6	2.9			
In-room check out systems	1.5	1.5	0.6	0.6	1.4			
Property management systems	9.2	7.6	9.0	9.0	14.4			

USE OF TECHNOLOGY BY REGION

Planning to Use

	PLANNING TO USE IN OPERATIONS							
	REGION							
	Atlantic	Québec	Ontario	Prairies	B.C. & Terr.			
	%	*	*	*	*			
Personal computers	4.9	, 3.2	2.8	4.4	3.2			
Online terminals	5.8	4.7	3.2	4.4	4.0 .			
Mainframe computer	3.9	3.5	1.4	1.7	2.2			
Mini-computer	2.4	6.5	3.8	4.4	3.6			
Electronic mail - private	9.2	19.3	12.0	12.8	13.7			
Electronic mail - public	6.8	11.6	7.1	7.5	11.2			
Voice mail	3.9	6.9	7.6	7.5	7.9			
Video conferencing	7.3	4.4	4.4	5.4	4.7			
Facsimile	3.9	2.5	2.9	6.3	1.4			
Desktop publishing	14.6	13.4	15.5	15.9	16.5			
External databases	9.7	9.7	6.7	8.2	9.4			
Telex	1.0	0.3	0.4	0.2	0.0			
Local area networks	12.6	16.6	17.3	15.7	18.3			
Wide area networks	5.8	11.4	10.1	8.6	12.9			
Electronic data interchange	11.7	18.5	16.1	16.1	12.2			
Mobile data communications	4.9	6.0	4.4	4.8	5.8			
Satellite data distribution	6.3	2.7	4.8	5.9	4.3			
Human resource management systems	13.1	19.1	14.6	15.1	15.8			
Computerized order entry	8.7	12.9	7.6	8.2	7.9			
Computerized inventory control	12.6	11.9	10.7	13.0	14.0			
Expert systems for decision support tool	10.2	14.9	12.1	12.0	13.3			
Computerized financial systems	1.5	3.7	4.0	3.8	4.0			
Electronic scanning systems	14.1	12.1	15.4	15.7	13.3			
Computer assisted education and training	14,6	9.7	11.2	10,1	14.4			
Electronic funds transfer	10.2	7.0	9.3	8.6	11.5			
Automatic teller machines	0.5	1.8	1.3	2.3	1.8			
Transportation systems	3.9	3.5	4.3	4.6	2.5			
Computer reservation systems	2.9	3.2	1.5	2.5	2.5			
Automated storage and retrieval systems	4.9	2.3	5.6	3.4	5.8			
Point of sale terminals	11.7	9.4	5.8	10.1	9.4			
Smart cards	3.9	2.9	3.9	3.6	4.3			
Computer-aided design (CAD)	4.4	3.4	5.4	4.2	4.3			
Computer-aided engineering (CASE)	5.3	2.0	3.9	4.2	2.9			
Computer-aided software engineering (CASE)	6.3	6.4	9.1	9,6	8.3			
In-room management systems	2.4	0.7	1.5	2.7	3.2			
In-room video systems	1.0	1.0	1.1	1.7	2.9			
In-room check out systems		 		2.7	 			
Property management systems	1.9 7.3	1.3 4.0	1.5 4.1	3.6	3.2			

USE OF TECHNOLOGY BY REGION

Not Planning to Use

REGION							
Atlantic	Québec	Ontario	Prairies	B.C. & Terr.			
	1			5.8			
			 	 			
 		<u> </u>	 	17.6			
				60.4			
				42.1			
65.5	58.1	52.9	59.5	52.5			
81.6	82.0	80.7	84.7	77.0			
93.2	89.6	84.3	89.1	86.0			
91.3	93.0	93.5	92.2	95.0			
12.6	6.2	6.9	9.6	6.8			
62.1	60.7	51.7	57.4	43.5			
75.2	67.3	69.1	73.0	63.7			
73,3	58.9	61.9	71.7	60.8			
54.9	40.8	40.6	50.5	38.5			
70.9	54.5	60.7	66.0	60.1			
72.3	57.0	65.0	68.5	69.4			
82.0	88.3	84.0	81.3	82.7			
92.7	95.3	90.8	91.4	91.4			
65.0	41.6	49.1	59.7	51.1			
52.9	35.9	38.4	45.5	44.2			
34.0	32.0	29.9	34.0	32.4			
82.5	72,3	75.5	77.8	69.1			
15.0	6.2	7.9	9.8	9.0			
				71.9			
			 	61.2			
			 	71.6			
	 			95.0			
				86.7			
				84.9			
				81.7			
				67.3			
·····				95.7			
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	· · · · · · · · · · · · · · · · · · ·			87.4			
	+						
	 			81.3			
	 	<u> </u>		93.9			
				94.2			
· · · · · · · · · · · · · · · · · · ·				97.5 82.4			
	\$\bigsymbol{\pi}\$ 11.7 27.7 62.1 52.9 65.5 81.6 93.2 91.3 12.6 62.1 75.2 73.3 54.9 70.9 72.3 82.0 92.7 65.0 52.9 34.0 82.5 15.0 74.3 68.4 76.2 99.0 83.5 88.3 85.4 61.2 96.1 85.0 90.3	% % 11.7 , 6.9 27.7 23.5 62.1 47.3 52.9 37.4 65.5 58.1 81.6 82.0 93.2 89.6 91.3 93.0 12.6 6.2 62.1 60.7 75.2 67.3 73.3 58.9 54.9 40.8 70.9 54.5 72.3 57.0 82.0 88.3 92.7 95.3 65.0 41.6 52.9 35.9 34.0 32.0 82.5 72.3 15.0 6.2 74.3 74.7 68.4 77.2 76.2 82.9 99.0 96.1 83.5 85.9 88.3 87.8 85.4 95.0 61.2 71.8 96.1 97.0 85.0 86.6 90.3 93.0 89.3	% % % 11.7 ,6.9 6.7 27.7 23.5 16.2 62.1 47.3 56.0 52.9 37.4 41.0 65.5 58.1 52.9 81.6 82.0 80.7 93.2 89.6 34.3 91.3 93.0 93.5 12.6 6.2 6.9 62.1 60.7 51.7 75.2 67.3 69.1 73.3 58.9 61.9 40.8 40.6 60.7 72.3 57.0 65.0 82.0 88.3 84.0 92.7 95.3 90.8 65.0 41.6 49.1 52.9 35.9 38.4 34.0 32.0 29.9 82.5 72.3 75.5 15.0 6.2 7.9 74.3 74.7 68.7 68.4 77.2 62.2 <	% % % % 11.7 , 6.9 6.7 9.2 27.7 23.5 16.2 24.5 62.1 47.3 56.0 65.2 52.9 37.4 41.0 41.7 65.5 58.1 52.9 59.5 81.6 82.0 80.7 84.7 93.2 89.6 84.3 89.1 93.2 89.6 84.3 89.1 91.3 93.0 93.5 92.2 12.6 6.2 6.9 9.6 62.1 60.7 51.7 57.4 75.2 67.3 69.1 73.0 73.3 58.9 61.9 71.7 54.9 40.8 40.6 50.5 70.9 54.5 60.7 66.0 72.3 57.0 65.0 68.5 82.0 88.3 84.0 81.3 92.7 95.3 90.8 91.4 65.0 </td			

NETWORKED PERSONAL COMPUTERS All Industries

NDUSTRY MAJOR		PERCENT	AGE OF PERSONAL C NETWORKED	OMPUTERS	
GROUP	0	1 to 25%	26 to 50%	51 to 75%	76 to 100%
Transportation	56.7	12.1	9.4	4.2	17.6
Communication	40.5	29.1	6.3	11.4	12.7
Wholesale Trade					
Farm Products	52.6	21.1	5.3	5.3	15.8
Petroleum Products	54.5	18.2	4.5	4.5	18.2
Food, Beverage, Drug and Tobacco	63.0	12.3	4.9	2.5	17.3
Apparel and Dry Goods	100.0	0.0	0.0	0.0	0.0
Household Goods	58.3	8.3	8.3	8.3	16.7
Motor Vehicle, Parts and Accessories	55.4	7.7	4.6	6.2	26.2
Metals, Hardware, Plumbing, Heating	64.8	11.4	7.6	2.9	13.3
Machinery, Equipment and Supplies	53.2	15.4	10.4	5.0	15.9
Other Products	60.7	20.2	6.0	0.0	13,1
Retail Trade					
Food, Beverage and Drug	61.0	9.0	6.0	4.0	20.0
Shoe, Apparel, Fabric and Yarn	67.4	12,6	2.1	2.1	15.8
Household Furniture, Appliances and Furn.	57.7	15.4	7.7	0.0	19.2
Automotive Vehicles, Parts and Acessories	61.8	10.9	4.5	3.6	19.1
General Retail Merchandising	51.2	23.3	11.6	2.3	11.6
Other Retail Store	61.3	14.5	6.5	1.6	16.1
Finance and Insurance					
Deposit Accepting Intermediary	37.1	22.6	9.7	8.1	22.6
Consumer and Business Financing Interm.	29.4	35.3	0.0	0.0	35.3
Investment Intermediary	44.4	22.2	5.6	11.1	16.7
Insurance	38.3	27.7	6.4	12.8	14.9
Other Financial Intermediary	37.9	27.6	6.9	3.4	24.1
Real Estate Oper. & Fin. Agents					
Real Estate Operators	53.6	15.9	8.7	4.3	17.4
Insurance and Real Estate Agent	49.1	12.7	7.3	7.3	23.6
Business Service	48.1	18.7	12.5	5 .5	15.2
Accom., Food & Beverage					
Accomodation Service	55.4	8.6	7.9	2.2	25.9
Food and Beverage Service	76.6	3.9	4.5	1.9	13.0
All Industries	55.5	14.9	7.8	4.5	17.3

NETWORKED PERSONAL COMPUTERS Companies with less than 200 employees

INDUSTRY MAJOR GROUP	PERCENTAGE OF PERSONAL COMPUTERS NETWORKED							
GROUP	0	1 to 25%	26 to 50%	51 to 75%	76 to 100%			
Transportation	60.5	10.2	7.8	1.8	19.8			
Communication	58.6	17.2	6.9	6.9	10.3			
Wholesale Trade								
Farm Products	53. 8	15,4	7.7	7.7	15.4			
Petroleum Products	71.4	14.3	7.1	0.0	7.1			
Food, Beverage, Drug and Tobacco	68.6	7.8	2.0	2.0	19.6			
Apparel and Dry Goods	100.0	0.0	0.0	0.0	0.0			
Household Goods	77.8	0.0	0.0	0.0	22.2			
Motor Vehicle, Parts and Accessories	55.6	6.7	6.7	6.7	24.4			
Metals, Hardware, Plumbing, Heating	69.4	8.1	6.5	4.8	11.3			
Machinery, Equipment and Supplies	54.9	15.0	12.0	3.8	14.3			
Other Products	62.5	17.9	5.4	0.0	14.3			
Retail Trade								
Food, Beverage and Drug	65.3	6.1	6.1	0.0	22.4			
Shoe, Apparel, Fabric and Yarn	70.3	5.4	2.7	5.4	16.2			
Household Furniture, Appliances and Furn.	73.3	0.0	6.7	0.0	20.0			
Automotive Vehicles, Parts and Acessories	64.4	7.8	4.4	4.4	18.9			
General Retail Merchandising	50.0	20.8	12.5	0.0	16.7			
Other Retail Store	71.4	14.3	5.7	0.0	8.6			
Finance and Insurance					***************************************			
Deposit Accepting Intermediary	50.0	8.3	4.2	12.5	25.0			
Consumer and Business Financing Interm.	20.0	20.0	0.0	0.0	60.0			
Investment Intermediary	40.0	20.0	10.0	10.0	20.0			
Insurance	52.0	8.0	8.0	20.0	12.0			
Other Financial Intermediary	53.8	15.4	7.7	0.0	23.1			
Real Estate Oper. & Fin. Agents								
Real Estate Operators	61.5	10.3	5,1	0 .0	23.1			
Insurance and Real Estate Agent	57.7	3.8	7.7	3.8	26.9			
Business Service	55.6	16.0	10.4	5.6	12.5			
Accom., Food & Beverage								
Accomodation Service	51.7	1.7	6.7	3.3	36.7			
Food and Beverage Service	83.1	1.5	1.5	3.1	10.8			
All Industries	61.4	10.3	7.0	3.7	17.6			

NETWORKED PERSONAL COMPUTERS Companies with 200 or more employees

NDUSTRY MAJOR	PERCENTAGE OF PERSONAL COMPUTERS NETWORKED							
GROUP	0	1 to 25%	26 to 50%	51 to 75%	76 to 100%			
Transportation	52.8	14.1	11.0	6.7	15.3			
Communication	30.0	36.0	6.0	14.0	14.0			
Wholesale Trade								
Farm Products	50. 0	33.3	0.0	0.0	16.7			
Petroleum Products	25.0	25.0	0.0	12.5	37.5			
Food, Beverage, Drug and Tobacco	53.3	20.0	10.0	3.3	13.3			
Apparel and Dry Goods	100.0	0.0	0.0	0.0	0.0			
Household Goods	0.0	33.3	33.3	33.3	0.0			
Motor Vehicle, Parts and Accessories	55.0	10.0	0.0	5.0	30.0			
Metals, Hardware, Plumbing, Heating	58.1	16.3	9.3	0.0	16.3			
Machinery, Equipment and Supplies	50.0	16.2	7.4	7.4	19.1			
Other Products	57.1	25.0	7.1	0.0	10.7			
Retail Trade								
Food, Beverage and Drug	56.9	11.8	5.9	7.8	17.6			
Shoe, Apparel, Fabric and Yarn	65.5	17.2	1.7	0.0	15.5			
Household Furniture, Appliances and Furn.	36.4	36.4	9.1	0.0	18.2			
Automotive Vehicles, Parts and Acessories	50.0	25.0	5.0	0.0	20.0			
General Retail Merchandising	52.6	26.3	10.5	5.3	5.3			
Other Retail Store	48.1	14.8	. 7.4	3.7	25.9			
Finance and Insurance								
Deposit Accepting Intermediary	28.9	31.6	13.2	5.3	21.1			
Consumer and Business Financing Interm.	33.3	41.7	0.0	0.0	25.0			
Investment Intermediary	50.0	25.0	0.0	12.5	12.5			
Insurance	33.3	34.8	5.8	10.1	15.9			
Other Financial Intermediary	25.0	37.5	6.3	6.3	25.0			
Real Estate Oper. & Fin. Agents								
Real Estate Operators	43.3	23.3	13.3	10.0	10.0			
Insurance and Real Estate Agent	41.4	20.7	6.9	10.3	20.7			
Business Service	42.7	20.6	14.1	5.5	17.1			
Accom., Food & Beverage			, ,					
Accomodation Service	58.2	13.9	8.9	1.3	17.7			
Food and Beverage Service	71.9	5.6	6.7	1.1	14.6			
All Industries	49.2	19.8	8.8	5.4	16.9			

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IMPORTANT

Please complete and return within 10 days of receipt.

Please correct mailing address if required

PURPOSE OF THE SURVEY

Studies have indicated that Canada lags behind most other advanced economies in the use of computer—based technologies. The purpose of this survey is to provide up—to—date information on the current and planned internal use of computer—based technologies and applications within establishments in Canada's service sector. This data, along with similar information from the survey of Manufacturing Technologies, will be critical to the federal government in policy formulation and program planning to promote the diffusion of computer—based technologies.

SPONSOR

This survey is conducted by Statistics Canada on behalf of Industry, Science and Technology Canada, Department of Communications and Employment and Immigration Canada.

PARTICIPATION

Participation in this survey is voluntary. Your cooperation in completing the questionnaire, however, is vital for the statistical information to be useful and valuable.

SCOPE

Because this survey covers a variety of service industries, not all the technologies listed in the questionnaire will necessarily be relevant to your establishment. Please respond for the address printed above if a single establishment or for all associated branches if a multi-unit establishment; and only for the industry printed below the address.

CONFIDENTIALITY

Statistics Canada is prohibited by law from publishing or releasing outside Statistics Canada, in any manner, any statistics which would divulge information obtained from this survey relating to any identifiable business. The data reported on the survey questionnaire will be treated in strict confidence, used for statistical purposes and released in aggregate form only. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation.

CORRESPONDENCE

If you require assistance in the completion of the questionnaire or have any questions regarding the survey, please contact one of the offices below:

Montreal

1-800-563-4255 (709) 772-4048	(514) 283-5724	(416) 973-6598
Haiifax 1-800-565-1685 (902) 426-8100	Sturgeon Falls 1-800-461-1662 (705) 753-4888	Winnipeg 1-800-665-3393 (204) 983-2773
Edmonton 1-800-661-9884 (403) 495-4627	Regina 1-800-667-7164 (306) 780-7445	Vancouver 1-800-663-0172 (604) 666-2649

Toronto

Calgary (403) 292-4907

St. John's

NAME OF PERSON FILLING OUT QUESTIONNAIRE	:	Telephone number:	

What percentage of your total number of personal computers are networked?

Guide To Technological Terminology

1. OFFICE EQUIPMENT TECHNOLOGIES

- 1.01 **Personal computers:** a desktop or portable computer used for data analysis, manipulation and storage, graphics, word processing.
- 1.02 Online terminals: any dumb terminal used to interact with a host computer.
- 1.03 Mainframe Computer: the largest type of computer.
- 1.04 Mini-computers: a mid sized computer, smaller than a mainframe, which can usually execute several programs concurrently.
- 1.05 **Electronic mail private**: permits the electronic transmission and storage of text messages, using own private facilities.
- 1.06 Electronic mail public: permits the electronic transmission and storage of text messages, using public facilities.
- 1.07 **Voice mail:** an electronic system for transmitting and storing voice messages, which can be accessed later by the recipient.
- 1.08 **Video conferencing:** a meeting of geographically separated participants who can simultaneously see and hear each other via a telecommunications system.
- 1.09 Facsimile: a system for transmitting and receiving pages (text, diagrams, pictures) over telecommunications links.
- 1.10 **Desktop publishing**: a personal computer/laser printer system which allows production of high–quality printing from a desktop.
- 1.11 External Databases: access to commercially available on-line database services.
- 1.12 **Telex:** a world—wide automatic teletype exchange where subscribers can dial each other for direct two—way communications.

2. TELECOMMUNICATIONS TECHNOLOGIES.

- 2.01 Local area networks: a network linking together communicating devices such as computers, word processors and other electronic office machines over limited distances (i.e. an inter-office).
- 2.02 Wide area networks: a network linking together communicating devices such as computers, word processors and other electronic office machines over long distances.
- 2.03 Electronic Data Interchange (EDI): Electronic transfer of standard business transaction information, for example computer linkages of suppliers and customers.
- 2.04 Mobile Data Communications: transmission of data via radio from a base station to a mobile unit.
- 2.05 Satellite Data Distribution: communications of data via satellites.

3. APPLICATIONS TECHNOLOGIES

- 3.01 Human Resource Management System: a computer application that maintains Personnel Management information such as employee personal data, career planning, absenteeism, training and skills data.
- 3.02 Computerized Order Entry: a system that computerized the order process.
- 3.03 Computerized inventory Control: a computer application used to manage and maintain a record of inventory.
- 3.04 Expert Systems as decision support tooi: use of Expert Systems (or Artificial Intelligence) as an input to the decision process.
- 3.05 Computerized financial system (acct./payroll): a computer application which maintains information related to the business' finances (e.g. accounting and payroll).
- 3.06 **Electronic Scanning Systems:** use of machine readable markings on products/packages (e.g. Universal Product Codes, Bar Coding and Optical Character Readers).
- 3.07 Computer assisted education and training: use of computer system to augment, or supplement, a more conventional instructional system, (e.g. computer—assistance instruction (CAI), computer—augmented learning (CAL)).
- 3.08 Electronic Funds Transfer (EFT): A cashless method of paying for goods or services. Electronic signals between computers are used to adjust the accounts of the parties involved in a transaction.
- 3.09 Automatic teller machines: a device for providing an automated banking service (e.g. cash dispensers)
- 3.10 **Transportation Systems:** a computer application that maintains information related to transportation (e.g. fleet management, freight rate analysis, logistics analysis).
- 3.11 Computer reservation systems: access to computer reservation systems (e.g. airline flight information systems or room reservation systems.)
- 3.12 Automated storage and retrieval system: form of automated materials/products/parcel handling, especially comprising an automated warehouse, where parts are stored in racks and retrieved on computerized carts and lift trucks.
- 3.13 **Point of sale terminals:** a device used in retail establishments to record sales information in a form that can be inputted directly into a computer, as distinguished from an electronic cash register.
- 3.14 Smart Cards: a credit card with a built-in computer.
- 3.15 Computer-aided design (CAD): use of computers to aid the designer from product conception to execution of engineering drawings.
- 3.16 Computer-aided engineering (CAE): use of computer-based tools to help solve engineering problems (e.g. concept design and performance analysis).
- 3.17 Computer-aided software engineering (CASE): Combination of techniques and tools aimed at building and maintaining software systems. CASE products enable faster and improved coding and testing during system development with features such as automatic code generation, information engineering, and enhanced techniques.
- 3.18 In—room management systems: provision of in—room services such as video breakfast selection, access to electronic mail, messages or databases, TV advertising (on in—house channels), or room status and availability.
- 3.19 In-room video systems: provision of in-room video movies.
- 3.20 In-room check out systems: provision of in-room video bill review and check-out.
- 3.21 **Property management systems:** a computer application that supports financial and management control of buildings. In the real estate sector PMS are typically used to list building/tenant information, leasing recoveries and rents receivables. In the Travel Industry PMS systems maintains room/guest information.

