

**SURVEY OF JOB OPENINGS IN THE
ST. LOUIS METROPOLITAN
STATISTICAL AREA, MO-IL:
INFORMATION TECHNOLOGY-PRODUCING SECTOR
WINTER 2004**

Public Policy Research Center –
Metropolitan Information & Data Analysis Services



**SURVEY OF JOB OPENINGS IN THE
IT-PRODUCING SECTOR**

ST. LOUIS METROPOLITAN STATISTICAL AREA, MO-IL
PUBLIC POLICY RESEARCH CENTER – MIDAS
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During the winter of 2004, in the IT-Producing sector, there were an estimated 579 full-time positions and 68 part-time positions open for immediate hire in the twelve-county St. Louis Metropolitan Statistical Area (MSA)¹. These results are based on a Job Openings Survey of area employers conducted by the Metropolitan Information and Data Analysis Services (MIDAS) section of the Public Policy Research Center (PPRC) at UM-St. Louis in partnership with the ETC Institute, a for-profit market research and survey services firm. The project is supported financially by the Workforce Investment Boards of the City of St. Louis in Missouri. Also assisting on this project are the Workforce Investment Boards of Madison, Bond, St. Clair, and Monroe counties in Illinois; Jefferson, Franklin, and St. Charles counties in Missouri; St. Louis Community College and the United Way of Greater St. Louis.

Background and Research Goals

The purpose of this research was to estimate current labor demand within the IT-Producing sector in the St. Louis region. This research was done in conjunction with the research efforts devoted to the labor demand information that pertains to the St. Louis region in the Workforce Information System (WIS). The WIS is a web-based system that has been developed and is maintained by the MIDAS section of the PPRC of the University of Missouri-St. Louis. Visit the WIS site at <http://pprc.umsi.edu/wis/> to find region-wide estimates of labor demand on a bi-annual basis. The WIS also provides information on the region's economy, population and other local systems such as school districts, transportation, workforce training and employment entities.

The research design for the IT-Producing sector analysis was finalized in the winter of 2004. ETC Institute administered the survey in January-February of 2004 and the results were presented in March 2004. The research goals of this study were as follows:

1. Survey the IT-Producing companies² in St. Louis MSA using the 6-digit North American Industry Classification System codes (NAICS 2002) (see Table 1) which include **Computer Hardware, Computer Software & Services, Communications Equipment** and **Communications Services**.
2. Prepare estimates of labor demand within the IT-Producing sector using a multi-method research design.
3. Provide information on the financial health of these IT-Producing companies, individually and as an industry; analyzed through sales, growth and employment outlooks of the sector.

¹ 6 estimated openings had no full-time or part-time distinction indicated

² Of the possible 43 IT-Producing NAICS Codes, only 32 of them are operating in the St. Louis MSA. The 43 categories are determined by counting the portions as 2 codes rather than 4 codes – see Table 1.

Methodology

The research design included three phases and employed multiple methods. A universe of 2,161 companies was drawn using the research produced by the U.S. Department of Commerce that is relevant to the 2002 NAICS codes that are associated with companies that employ IT-Producing services, methods and technologies (see Table 1). As part of phase one, ETC Institute called all 2,161 companies and asked if they were an IT-Producing company. If the company answered yes, they were asked to complete a seventeen (17) question telephone survey about the company’s financial health and employment outlook. If the company responded yes to the final question of whether they had current job openings, they were mailed a Job Openings Survey which is the same as the questionnaire administered in the regional Job Openings Survey conducted twice yearly by MIDAS. The survey can be found on the WIS website in the section “ON-LINE SURVEY”. The report that follows contains a summary of the major findings of this survey effort.

Table 1. Information Technology-Producing Industries (2002 NAICS)

NAICS Code	Computer Hardware	NAICS Code	Software and Computer Services
333295	Semiconductor machinery	511210	Software publishers
333313	Office machinery	518111	ISPs and web search portals
334111	Electronic computers	518112	ISPs and web search portals
334112	Computer storage devices	518210	Data processing and related services
334113	Computer terminals	532420	Office machine rentals and leasing
334119	Other computer peripheral equipment	541511	Custom computer programming services
334411	Electron tubes	541512	Computer systems design services
334412	Bare printed circuit boards	541513	Computer facilities management services
334413	Semiconductors and related devices	541519	Other computer-related services
334414	Electronic capacitors	811212	Computer and office machine repair
334415, 6,9	Miscellaneous electronic components	423430	Computer and software wholesalers (part)
334417	Electronic connectors	443120	Computer and software retailers (part)
334418	Printed circuit assemblies		
334513	Industrial process variable instruments		
334515	Electricity and signal testing instruments		
334516	Analytical laboratory instruments		
423430	Computer and software wholesalers (part)		
443120	Computer and software retailers (part)		
	Communications Equipment		Communications Services
334210	Telephone apparatus	517110	Wired telecommunications carriers
334220	Broadcast and wireless communications equipment	517212	Cellular and other wireless carriers
334310	Audio and video equipment	517310	Telecommunications resellers
334611	Software reproducing	517410, 910	Satellite and other telecommunications services
334613	Magnetic and optical recording media	517510	Cable and other program distribution
335921	Fiber optic cable manufacturing	811213	Communications equipment repair and leasing

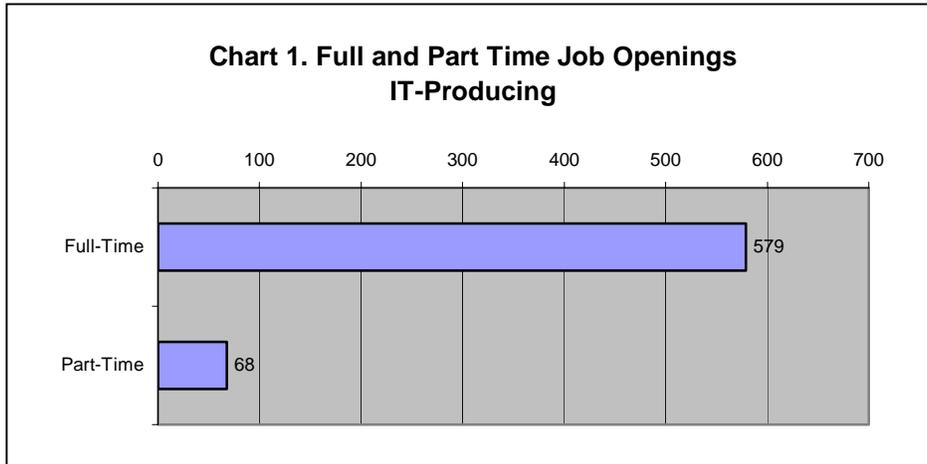
Source: U.S. Department of Commerce, Digital Economy 2003.

Part 1: Job Openings Survey Findings³

Total Openings. During the winter of 2004 IT-Producing employers were seeking workers for an estimated:

653 Total Job Openings⁴

- 579 Full-Time Job Openings
- 68 Part-Time Job Openings
- 6 Not Provided



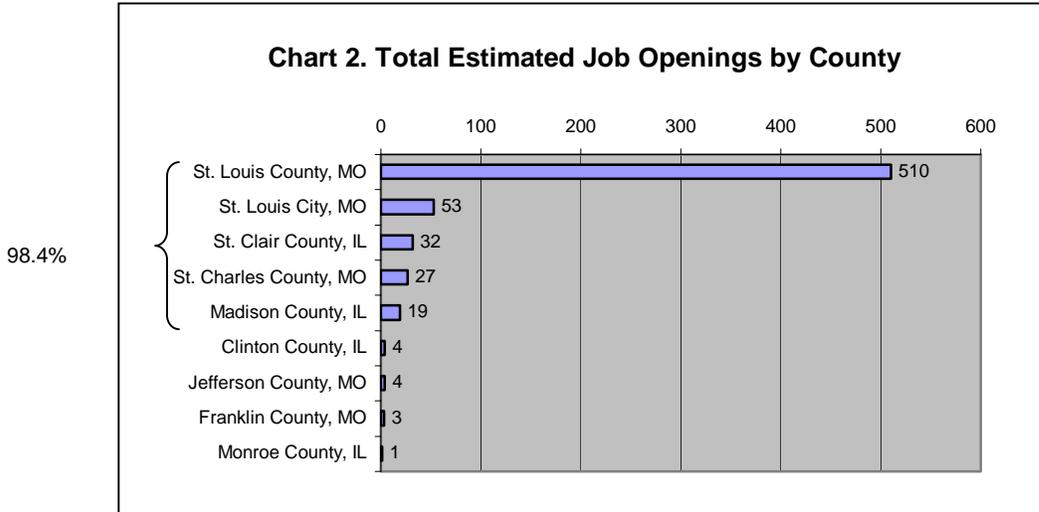
³ All totals and percentages in Part 1 of this report are based on the total number of estimated IT-Producing jobs or number of estimated openings by industry total in the St. Louis, MO-IL MSA unless otherwise indicated.

⁴ There were 50 different Occupation Codes reported for an estimated 651 job openings in the IT-Producing Industry in the St. Louis, MO-IL MSA. The other two job openings were not given a formal job title – the positions are new.

Industry Distribution. Five sub-categories within the IT-Producing Industry dominated the number of job openings in the St. Louis MO-IL MSA, representing 93.4% or 610 estimated job openings.

Industry	Total	Percent	
Custom Computer Programming Services	459	70.3	} 93.4%
Computer And Software Stores	74	11.3	
Cellular And Other Wireless Telecommunications	37	5.7	
Data Processing, Hosting, And Related Services	26	4.0	
Computer & Office Mach Rpr/Maint	14	2.1	
Computer/Peripheral Equip/Software Merchant Whol	8	1.2	
Other Telecommunications	6	0.9	
Other Computer Related Services	5	0.8	
Internet Service Providers	4	0.6	
Other Electronic Component Mfg	4	0.6	
Computer Systems Design Services	3	0.5	
Software Publishers	3	0.5	
Communication Equip Repair/Maintenance	2	0.3	
Computer Facilities Management Services	2	0.3	
Electronic Computer Mfg	2	0.3	
Wired Telecommunications Carriers	2	0.3	
Telecommunications Resellers	1	0.2	
Telephone Apparatus Mfg	1	0.2	
Total	653	100.0	

Geography Distribution⁵. 100% of estimated job openings were found in nine (9) of the twelve (12) counties in the St. Louis, MO-IL MSA with 98.4% found in just 5 counties.



Expereince Requirements. 68.6% of the estimated job openings required *three years of experience or less*. An additional 26.6% of the estimated job openings required *4-10 years* of experience.

Experience Required	Total	Percent
< 1 year or No experience	75	11.5
1-3 years	373	57.1
4-10 years	174	26.6
10+ years	7	1.1
All Other	24	3.7
Total Estimated Job Openings	653	100.0

} 68.6%

⁵ There were no reported job openings in Jersey County, IL, Lincoln County, MO or Warren County, MO.

Reported Wages⁶. 17.9% of all the estimated job openings paid between \$8 and \$14.99 per hour, while another 77.5% paid \$15.00 per hour or higher. Based on survey results, 86.8% of the estimated job openings paying \$15.00 per hour or higher required a two year associates degree or higher. An additional 6.9% of those jobs paying \$15.00 per hour or higher required professional or technical certification and 5.7% required only a high school degree or less.

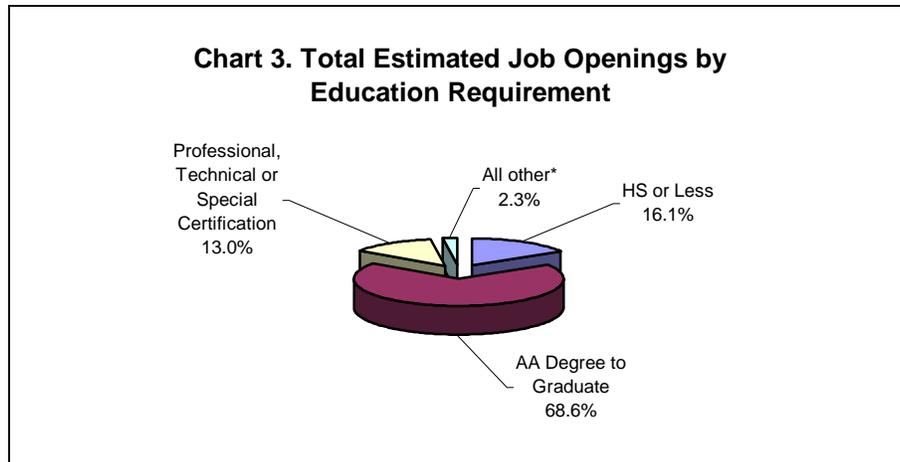
Less than \$8.00 per hour	20	4.6%
\$8-14.99 per hour	77	17.9%
\$15.00+ per hour	334	77.5%
HS or Less	19	5.7%
AA Degree +	290	86.8%
Professional or Technical Certification	23	6.9%
All other responses*	2	0.6%

*Includes Don't know/not sure

Education Requirements. 68.6% of all estimated openings required a two year associated degree or higher.

HS or Less	105	16.1%
AA Degree to Graduate	448	68.6%
Professional, Technical or Special Certification	85	13.0%
All other*	15	2.3%

*Includes Other and Don't know/not sure



⁶ Percentages based on the number of estimated job openings reported (N = 431). 34.0%, or 222, of the estimated job openings had no reported wage.

Training Opportunities. *On-the-job training* was the most prevalent training option offered at 43.3% of the estimated openings.

O-T-J Training	283	43.3%
Internships	147	22.5%
Mentoring	56	8.6%

Benefits⁷. *Medical* (84.4%), *dental* (76.3%) and *vacation* (67.5%) benefits were offered the most often. Sub-categories offering a full range of benefits included *Computer & Office Machine Repair/Maintenance*, *Computer & Software Stores*, *Custom Computer Programming Services* and *Data Processing, Hosting, & Related Services*.

Medical	551	84.4%
Dental	498	76.3%
Vacation	441	67.5%
Childcare	92	14.1%
No Benefits	29	4.4%
Transportation	10	1.5%

Job Incentives⁸. The most common job incentives offered were *401K* (75.8%), *tuition reimbursement* (44.3%), *bonus* (29.9%) and *on-going training* (22.5%). These 4 incentives were found across the sub-categories of *Computer & Software Stores*; *Computer Systems Design Services*; *Computer/Peripheral Equipment/Software Merchant Wholesalers*; *Custom Computer Programming Services*; *Data Processing, Hosting, & Related Services* and *Other Computer Related Services*.

401K	495	75.8%
Tuition	289	44.3%
Bonus	191	29.2%
On-going Training	147	22.5%
Commission	73	11.2%
Stock	61	9.3%
Pension	48	7.4%
No Incentives	33	5.1%
SAR	8	1.2%

⁷ 25, or 86.2%, of those estimated job openings offering *no benefits* are part-time positions.

⁸ 19, or 57.6%, of those estimated job openings offering *no incentives* are part-time positions.

Skill Requirements. Over nine out of 10 (93.1%) of the estimated job openings required reading skills *greater than 10th grade level*, with equivalent math skills (see Chart 4 & 5) required at 93.3% of estimated job openings. This is mostly due to 81.6% of the estimated job openings requiring *professional, technical or special certification* (13.0%) or an *associates degree or higher* (68.6%). *Custom Computer Programming Services*, which made up 70.3% of all estimated IT-Producing job openings, required reading and math skills *greater than 10th grade*; 69.7% and 70.0%, respectively, of the sub-category's total estimated job openings.

Reading Skills Requirement

No Reading skills required	3	0.5%	
< 10th grade	3	0.5%	
10th grade	18	2.8%	
> 10th grade	608	93.1%	←
Don't Know/Not Sure	21	3.2%	

Math Skills Requirements

No Math skills required	12	1.8	
< 10th grade	3	0.5	
10th grade	22	3.4	
> 10th grade	609	93.3	←
Don't Know/Not Sure	7	1.1	

Chart 4. Total Estimated Job Openings Requiring Reading Skills Greater than 10th Grade by Sub-category

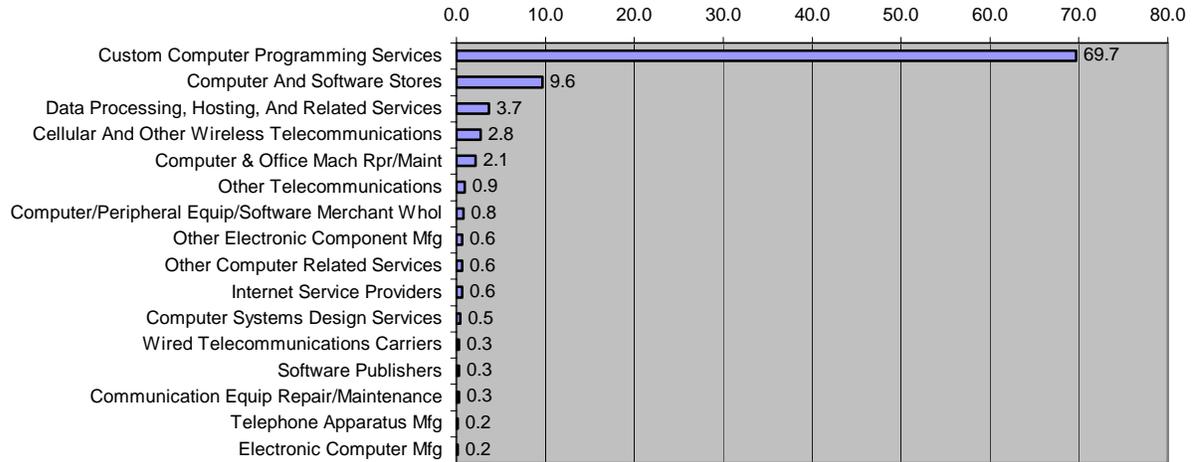


Chart 5. Total Estimated Job Openings Requiring Math Skills Greater than 10th Grade by Sub-category

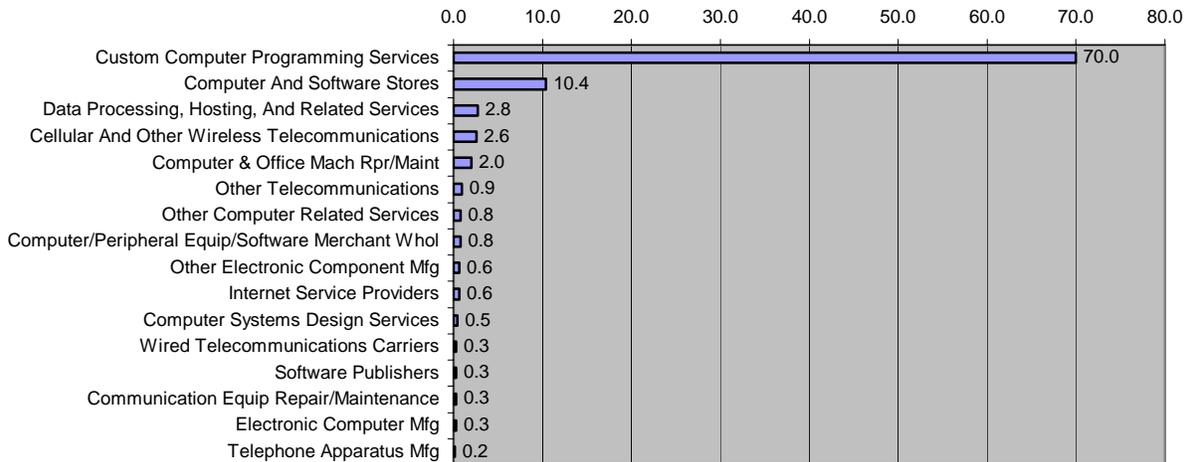
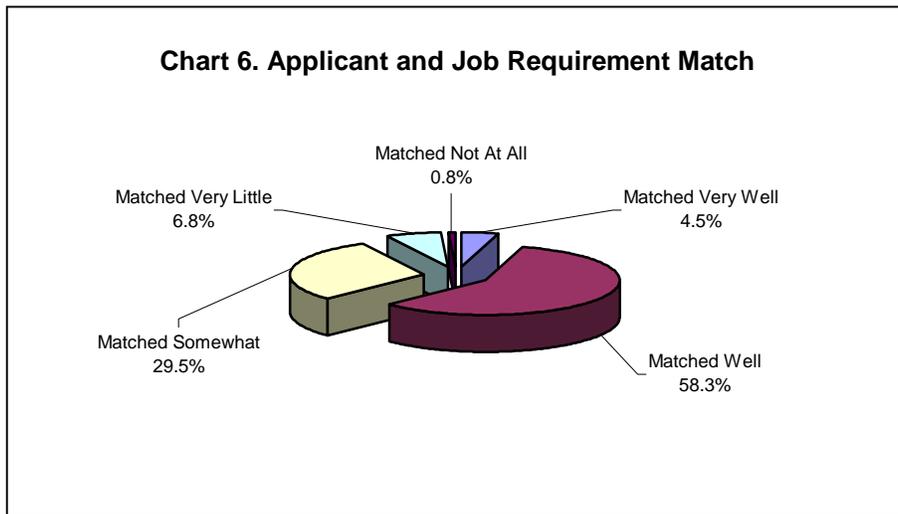


Chart 4 and 5 Percent of Total Estimated Job Openings

Applicants’ Skills Compared to Job Requirements⁹. When survey respondents were asked to rate the skills of applicants in comparison with the skill requirements of the job openings reported, 58.3% responded *matched well* while another 29.5% responded *matched somewhat*.

Matched Very Well	4.5%	
Matched Well	58.3%	←
Matched Somewhat	29.5%	
Matched Very Little	6.8%	
Matched Not At All	0.8%	

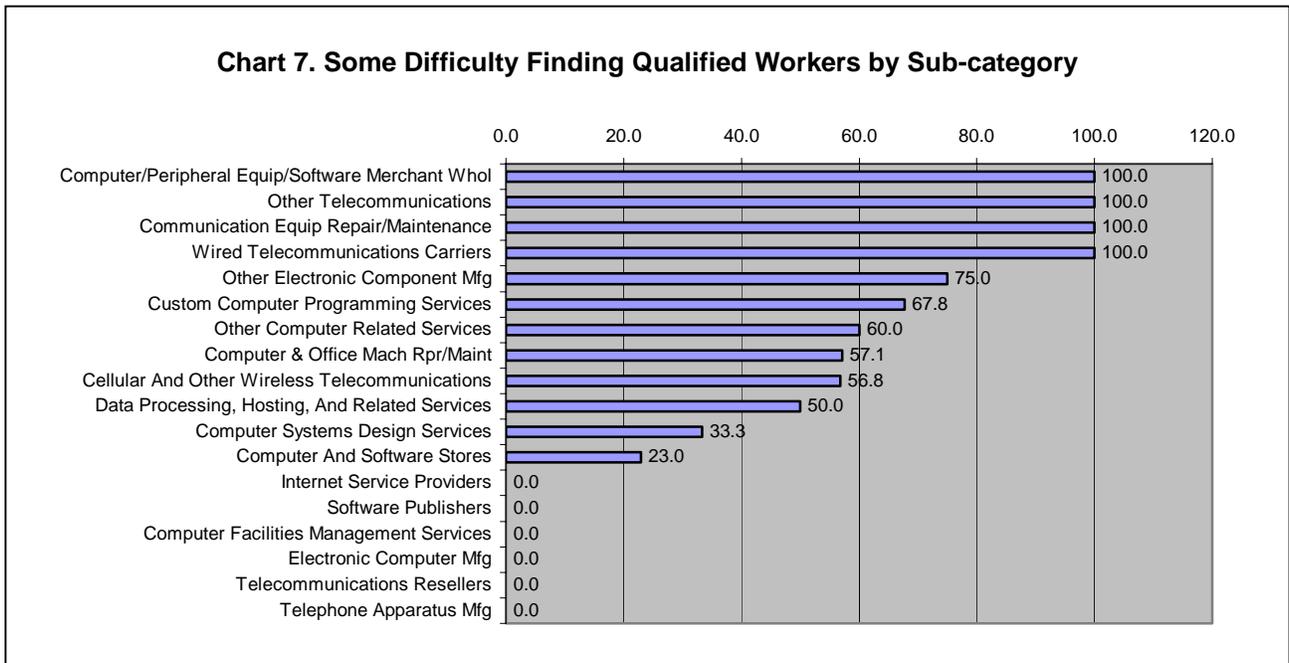


Difficulty Finding Applicants¹⁰. When survey respondents were asked to rate the difficulty finding qualified workers, 73.3% (see Chart 7) said that they had *some difficulty* while only 18.9% said they had *no difficulty*.

Great Difficulty	7.8%	
Some Difficulty	73.3%	←
No Difficulty	18.9%	

⁹ These percentages are based on those estimated job openings where the respondent provided information (N = 528); all others responded *don't know/not sure* (N= 125).

¹⁰ These percentages are based on those estimated job openings where the respondent provided information (N = 539); all others responded *don't know/not sure* (N= 114).



Shortcomings of Recent Applicants¹¹. Survey respondents were asked to identify which personal attributes, workplace competencies and/or skills were found lacking in recent applicants. *Poor technical skills* were the most reported shortcoming at 51.3%, followed by *poor communication skills* (51.1%) and *poor customer service skills* (45.7%).

**Percent Responding
Yes**

Poor Technical Skills	51.3
Poor Communication Skills	51.1
Poor Customer Service Skills	45.7
Lack of Industry Knowledge	13.1
Lack of Positive Attitude	11.4
Poor Work Ethic	10.8
Lack of Computer Skills	9.5
Poor Basic Math	4.7
Inability to Understand Written Information	4.5
Poor Writing Skills	4.5

¹¹ Percentages based on the total number of openings in which one or more of the workplace competencies and/or skills were reported in the Shortcomings Category (N= 464).

Workplace Competencies¹². Survey respondents were asked to identify a series of personal attributes that were considered important to the job performance of a worker in a particular IT-Producing occupation. All attributes were found to be positively important ranging from *job specific skills* at 87.3% to *team skills* at 98.8%.

Percent Responding Important

Team Skills	98.8
Acquiring and Using Information	98.2
Work Habits	98.3
Managing Time Wisely	97.7
Computer Literacy	94.6
Leadership	94.6
Job Specific Skills	87.3

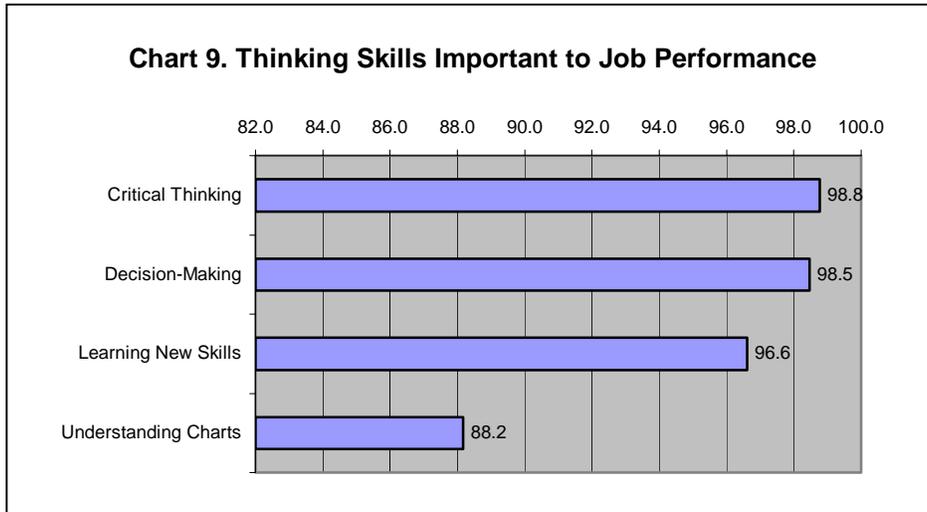


¹²Percentages based on the total number of openings in which one or more of the personal attributes were reported in the Workplace Competencies Category (N=652).

Thinking skill¹³. Survey respondents were also asked to consider what types of thinking skills were important to the job performance of a worker in a particular IT-Producing occupation. These skills included *critical thinking* (98.8%), *decision-making* (98.5%), *learning new skills* (96.6%), and *understanding charts* (88.2%),.

**Percent Responding
Yes**

Critical Thinking	98.8
Decision-Making	98.5
Learning New Skills	96.6
Understanding Charts	88.2



¹³ Percentages based on the total number of openings in which one or more of the skills were reported in the Thinking Skills Category (N=561).

Full-Time Occupations by Required Education

Four-Year College Degree or Higher

Business Operations Specialists, All Other
Computer and Information Systems Managers
Computer Programmers
Computer Software Engineers, Applications
Computer Software Engineers, Systems Software
Computer Support Specialists
Computer Systems Analysts
Database Administrators
Electronics Engineers, Except Computer
Graphic Designers
Managers, All Other
Marketing Managers
Network and Computer Systems Administrators
Network Systems and Data Communications Analysts
Paralegals and Legal Assistants
Personnel Recruiters
Registered Nurses
Sales Managers
Sales Representatives, Electrical/Electronic
Training and Development Specialists

Two Year Associated Degree

Training and Development Specialists
Computer and Information Systems Managers
Computer Programmers
Computer Software Engineers, Applications
Computer Software Engineers, Systems Software
Computer Support Specialists
Graphic Designers
Marketing Managers
Network and Computer Systems Administrators
Receptionists and Information Clerks
Sales Managers
Sales Representatives, Electrical/Electronic

Full-Time Occupations by Required Education

Professional, Technical or Special Certification

Accountants
Computer and Information Systems Managers
Computer Programmers
Computer Software Engineers, Applications
Computer Software Engineers, Systems Software
Computer Support Specialists
Computer Systems Analysts
Database Administrators
Human Resources, Training, and Labor Relations Specialists, All Other
Maintenance and Repair Workers, General
Marketing Managers
Network and Computer Systems Administrators
Network Systems and Data Communications Analysts
Numerical Control Machine Tool Operators and Tenders, Metal and Plastic
Production, Planning, and Expediting Clerks
Public Relations Specialists
Sales Managers
Sales Representatives, Electrical/Electronic
Technical Writers
Training and Development Specialists

High School Degree or Some High School

Accountants
Automotive Body and Related Repairers
Commercial and Industrial Designers
Computer Operators
Computer Programmers
Computer Software Engineers, Systems Software
Computer Support Specialists
Computer Systems Analysts
Customer Service Representatives
Electrical and Electronic Equipment Assemblers
Executive Secretaries and Administrative Assistants
First-Line Supervisors/Managers of Retail Sales Workers
Graphic Designers
Grinding and Polishing Workers, Hand
Loan Officers
Office and Administrative Support Workers, All Other
Sales Representatives, Electrical/Electronic
Sales Representatives, Services, All Other
Security Guards
Shipping, Receiving, and Traffic Clerks
Telecommunications Line Installers and Repairers
Telemarketers

No Education Required

Computer and Information Systems Managers
Computer Programmers
Production Laborers

Part 2: IT-Producing Company, Industry and Employment Trend¹⁴

IT-Producing companies were asked a series of questions about their assessment of the company's recent and near-term sales and employment history. In addition, they were asked to assess their industry's performance and describe what they believed were the greatest challenges to company growth. Finally, they were asked to list the methods by which they recruit employees.

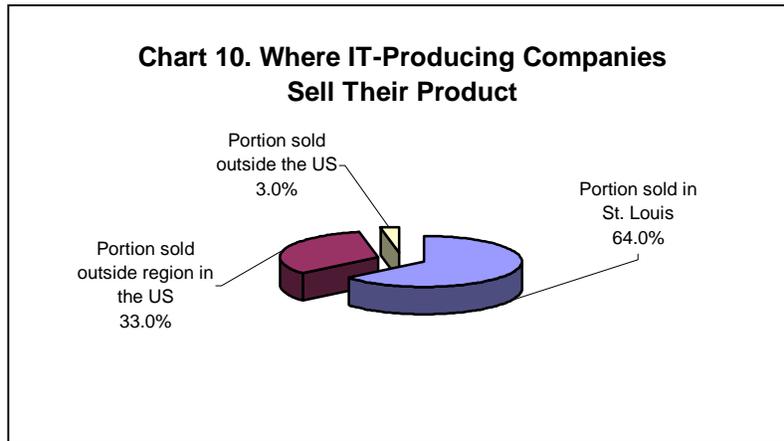
Overall, the results show that IT-Producing companies are optimistic about their future sales and employment. A modest number of companies, approximately 1 in 7, anticipate that sales will stay the same or grow modestly in the coming year. Even more promising, a large portion of the IT-Producing companies did not experience employment declines and many anticipate maintaining this level of employment one year into the future. In addition, approximately 1 in 7 companies reported good, very good, or excellent financial health or profitability. However, at the same time, survey respondents rated the industry's overall health and profitability lower, with fewer companies rating the industry health as excellent or very good and more companies rating it as fair. The greatest reported challenges¹⁵ to company growth were finding qualified labor and access to capital. IT-Producing companies reported using referrals, the Internet, newspaper and colleges/universities as the methods most often used for employee recruitment.

¹⁴ All totals and percentages in Part 2 of this report are based on total number of respondents.

¹⁵ *Other* consisted of 35.5% of all responses but consists of a large range of miscellaneous responses too numerous to categorize or list.

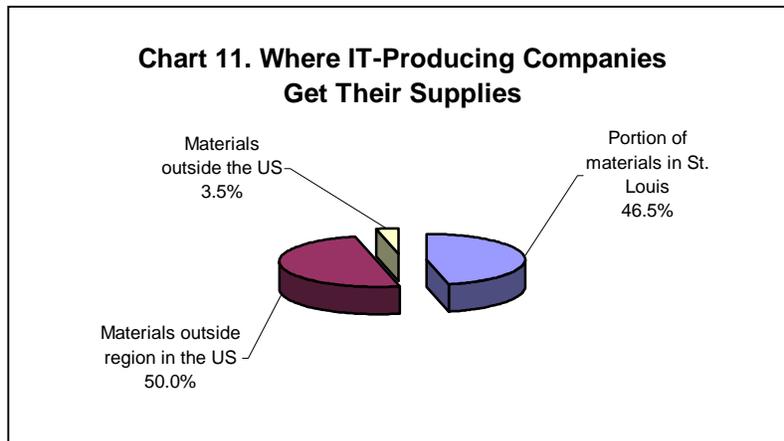
Where IT-Producing companies in the St. Louis region sell their products/services¹⁶:

In St. Louis	Mean = 64.0%
Outside St. Louis region (in the US)	Mean = 33.0%
Outside the US	Mean = 3.0%



Where IT-Producing companies in the St. Louis region get their supplies¹⁷:

In St. Louis	Mean = 46.5%
Outside St. Louis region (in the US)	Mean = 50.0%
Outside the US	Mean = 3.5%



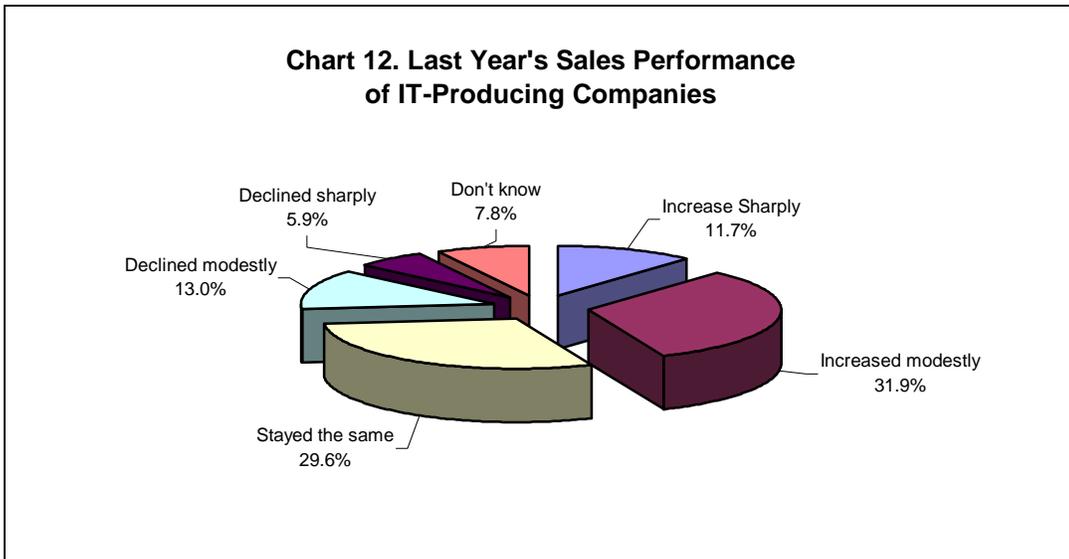
¹⁶ Mean distribution all respondents where n = 523.

¹⁷ Mean distribution all respondents where n = 523.

Last Year's Sales Trends. IT-Producing companies were asked to describe the sales of their company over the past year. Overall, 73.2% of IT-Producing companies reported sales that either *stayed the same* or *increased* during the past year with 43.6% of these companies showing an increase, whether moderate (31.9%) or sharp (11.7%)

During the past year, have your sales:

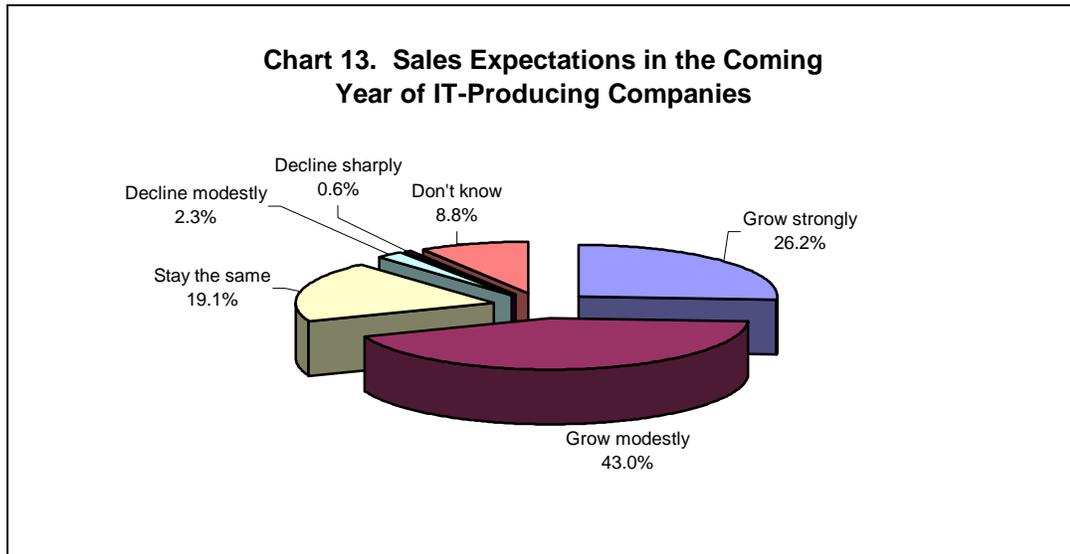
Increase sharply	61	11.7%	} 73.2%
Increased modestly	167	31.9%	
Stayed the same	155	29.6%	
Declined modestly	68	13.0%	
Declined sharply	31	5.9%	
Don't know	41	7.8%	



Sales Expectations in the Coming Year. IT-Producing companies were asked to describe their sales expectations for the coming year. Overall, IT-Producing companies were optimistic with 69.2% expressing strong or modest growth over the next year while another 19.1% responded that they thought their sales would stay the same in the coming year.

In the coming year do you expect your sales to:

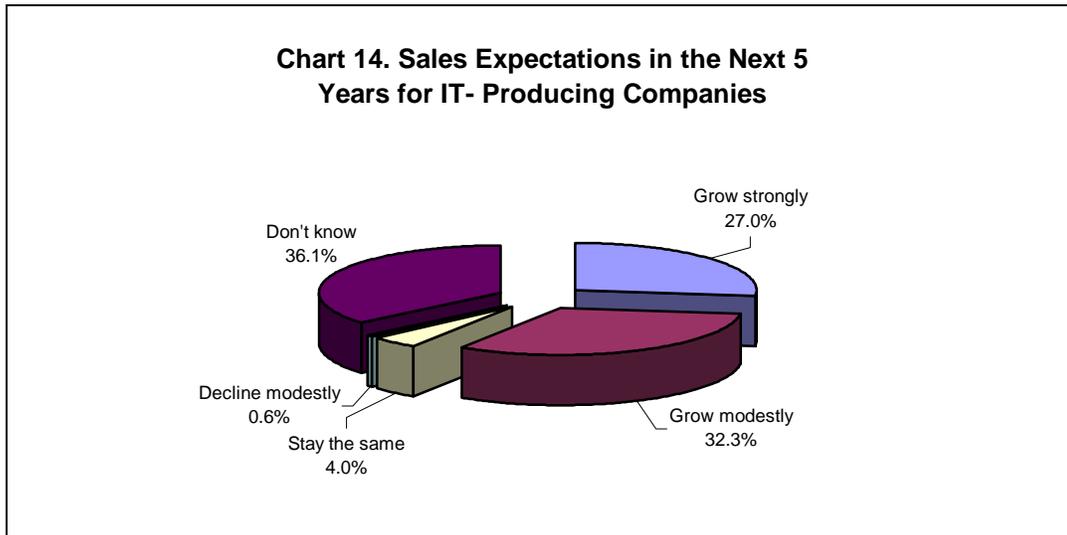
Grow strongly	137	26.2%	} 69.2%
Grow modestly	225	43.0%	
Stay the same	100	19.1%	
Decline modestly	12	2.3%	
Decline sharply	3	0.6%	
Don't know	46	8.8%	



Sales Expectations over the Next Five Years. IT-Producing companies were asked to describe their sales expectations for the next five years. Overall, most IT-Producing companies had positive expectations (59.2%) for their company’s growth 5 years into the future, with 32.3% expecting to *grow modestly* and another 27.0% expecting to *grow strongly* over the next five years.

Over the next five years do you expect your sales to:

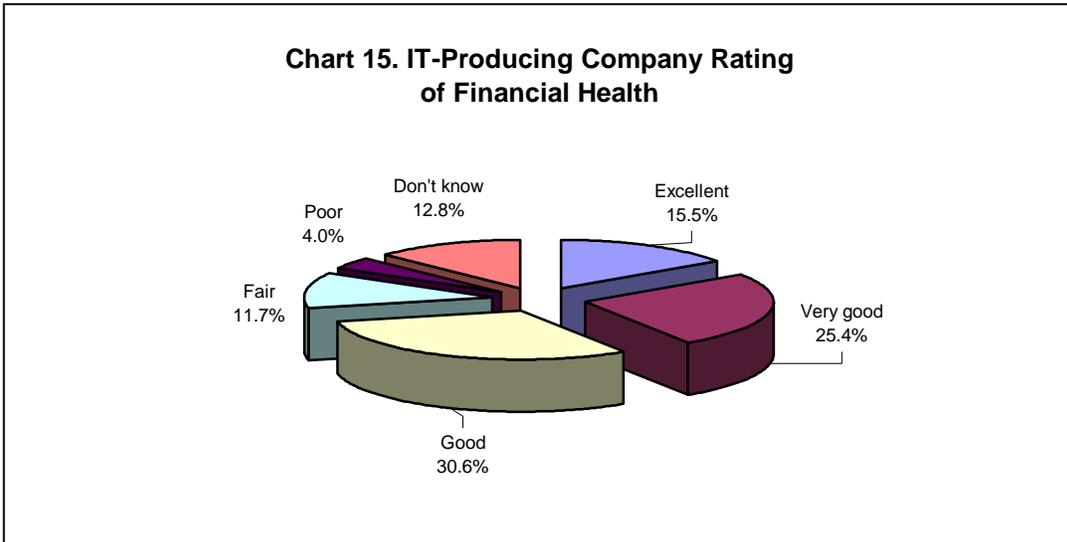
Grow strongly	141	27.0%	} 59.2%
Grow modestly	169	32.3%	
Stay the same	21	4.0%	
Decline modestly	3	0.6%	
Don't know	189	36.1%	



Company Financial Health and/or Profitability. IT-Producing companies were asked to describe their company’s financial health and/or profitability. Overall, ratings were consistently high with 71.5% of IT-Producing companies rating their health *excellent, very good or good*.

Rate your company’s financial health:

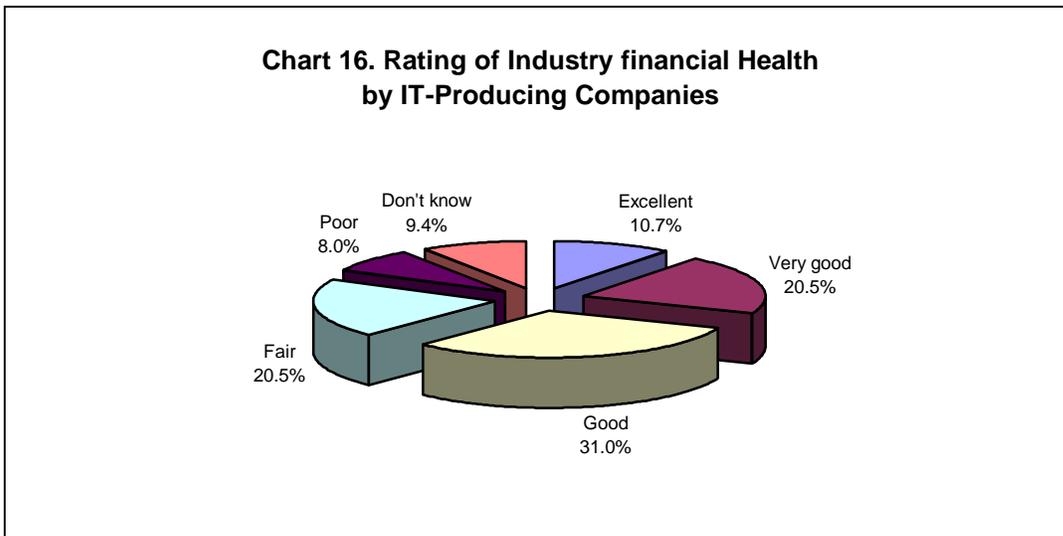
Excellent	81	15.5%	}	71.5%
Very good	133	25.4%		
Good	160	30.6%		
Fair	61	11.7%		
Poor	21	4.0%		
Don't know	67	12.8%		



Industry Financial Health and/or Profitability. IT-Producing companies were asked to describe the financial health and/or profitability of their industry. Over half (62.2%) of the companies rated the industry’s health as *excellent*, *very good* or *good*, while 20.5% reported *fair* ratings.

Rate your industry’s financial and/or profitability:

Excellent	56	10.7%	} 62.2%
Very good	107	20.5%	
Good	162	31.0%	
Fair	107	20.5%	
Poor	42	8.0%	
Don't know	49	9.4%	

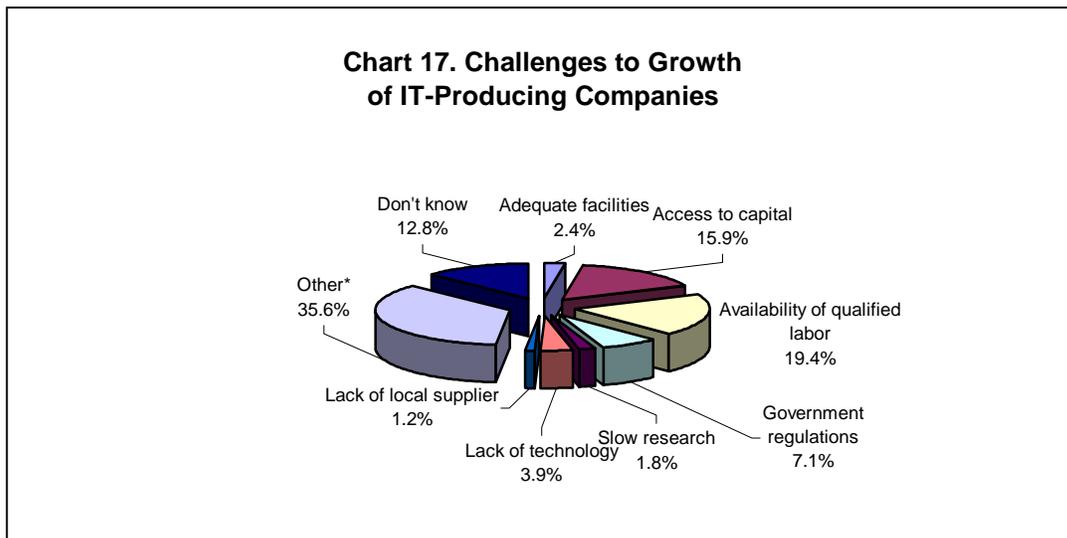


Greatest Challenges to Continued Company Growth. IT-Producing companies were asked to choose, from many options, what they believed posed the greatest challenge to their continued growth. *Availability of qualified labor* (19.4%) was cited most often by IT-Producing companies with *access to capital* reported slightly less (15.9%).

Greatest challenges to continued growth:

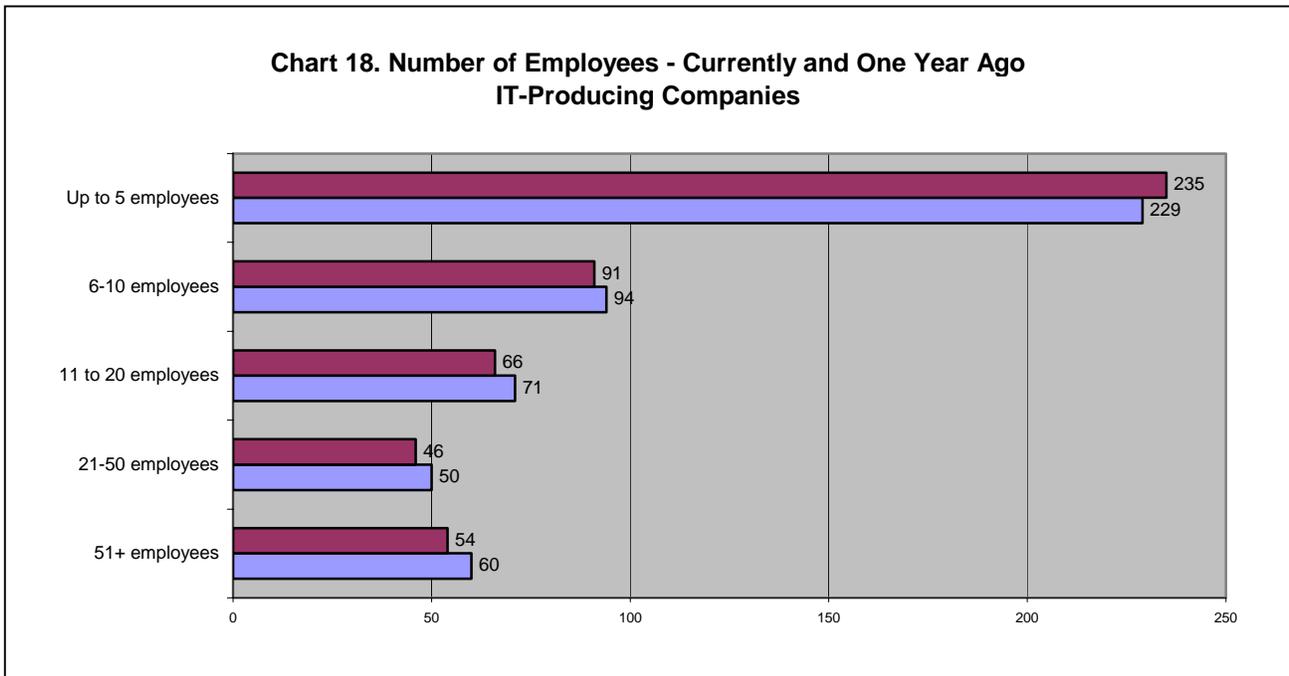
Other*	35.6%
Availability of qualified labor	19.4%
Access to capital	15.9%
Don't know	12.8%
Government regulations	7.1%
Lack of technology	3.9%
Adequate facilities	2.4%
Slow research	1.8%
Lack of local supplier	1.2%

*See Appendix A.



IT-Producing Employment¹⁸. IT-Producing companies were asked a series of questions relating to their level of employment. They were asked how many people they currently employ, followed by questions relating to past (one year ago) and future employment (in the coming year and five years). The employment picture, which is relatively unchanged, is consistent with economic conditions of the past year. The data is summarized below.

Number of Employees	Current		One Year Ago	
	Count	Percentage	Count	Percentage
51+ employees	60	11.9%	54	11.0%
21-50 employees	50	9.9%	46	9.3%
11 to 20 employees	71	14.1%	66	13.4%
6-10 employees	94	18.7%	91	18.5%
Up to 5 employees	229	45.4%	235	47.8%

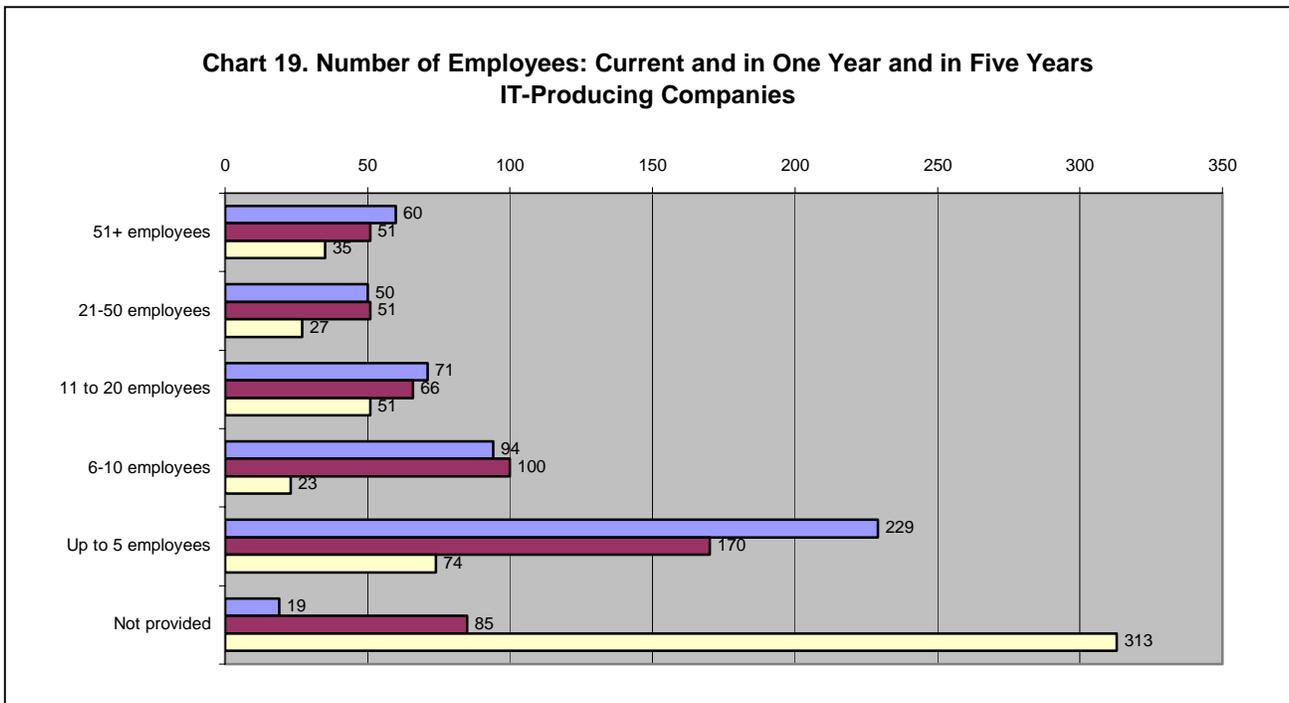


¹⁸ Percentages based on companies that responded to the question “How many employees does your company CURRENTLY employ in the St. Louis metropolitan area?” (Current year: N = 504, One year ago: N = 492).

IT-PRODUCING LABOR DEMAND SURVEY REPORT..... WINTER 2004

For most companies the employment picture is expected to remain relatively unchanged one year into the future, which is consistent with the economic condition of the past year. Overall, the uncertainty created by the current extended soft labor market is reflected in the data collected from respondents asked to project employment five years out. The large number of *Not provided* responses to this question reflects this uncertainty. The data is summarized below.

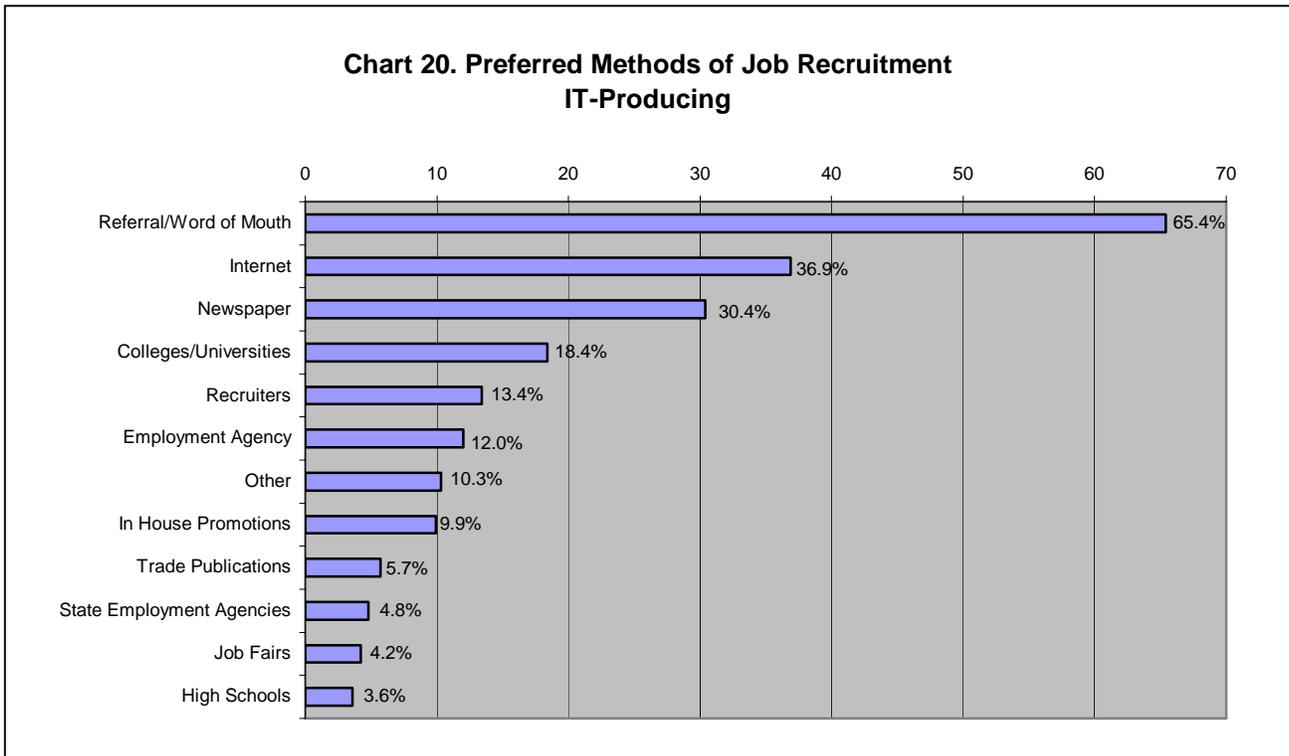
Number of Employees	Current		In One Year		In Five Years	
	Count	Percentage	Count	Percentage	Count	Percentage
51+ employees	60	11.5%	51	9.8%	35	6.7%
21-50 employees	50	9.6%	51	9.8%	27	5.2%
11 to 20 employees	71	13.6%	66	12.6%	51	9.8%
6-10 employees	94	18.0%	100	19.1%	23	4.4%
Up to 5 employees	229	43.8%	170	32.5%	74	14.1%
Not provided	19	3.6%	85	16.3%	313	59.8%



Company Employment Recruitment. IT-Producing companies were asked to describe what methods they employ to fill job openings. The most common methods used were *Referral, the Internet, Newspaper, and Colleges/Universities.*

What methods does your company use to recruit employees:

Referral/Word of Mouth	342	65.4%
Internet	193	36.9%
Newspaper	159	30.4%
Colleges/Universities	96	18.4%
Recruiters	70	13.4%
Employment Agency	63	12.0%
Other	54	10.3%
In House Promotions	52	9.9%
Trade Publications	30	5.7%
State Employment Agencies	25	4.8%
Job Fairs	22	4.2%
High Schools	19	3.6%



Appendix B

***Other Challenges to Continued Growth**

- ABILITY TO CHANGE TO MEET NEEDS=
- ABILITY TO GET OUR NAME OUT THE...
- ACQUIRING NEW BUSINESS=
- ADDING ON NEW CUSTOMERS=
- ADOPTION OF TECHNOLOGY BY CO...
- AVAILABILITY OF BANKING CUSTOM...
- BIG CHAIN CO-COMPETITORS=
- BREAKING INTO COMMERCIAL AREA=
- BUSINESS DEVELOPMENT=
- CLIENTELE & DATABASE=
- COMPUTER DEALERS=
- CONSUMER KNOWLEDGE=
- CONSUMER TECH INNOVATIONS=
- CORP UNDERSTANDING & EDUC=
- CUSTOMER BASE=
- CUSTOMER SERVICE=
- CUSTOMERS=
- DEPENDS ON INTERACTIVE MEDIA=
- DIRECT MARKETING=
- EDUC & KEEPING UP W/IT CHANGES=
- EDUCATING THE MARKET=
- END OF LIFE FOR CITATION SOLUTIO...
- ENOUGH HOURS IN A DAY=
- FINDING NEW BUSINESS=
- FINDING QUALIFIED COMPANIES=
- FOREIGN COMPETITION=
- FUNDING=
- GOVERNMENT FUNDING=
- GOVERNMENT LEGALITIES-FOREIGN...
- GOVERNMENT ORGANIZATIONS=
- GOVERNMENT RESTRAINTS-FUNDING=
- GROWTH OF SALES=
- INTERNET=
- JUST TO KEEP GROWING=
- JUST TRYING TO KEEP CO GOING=
- LACK OF CUSTOMERS=
- LACK OF DEMAND=
- LACK OF GOOD QUALIFIED MARKETI...
- LACK OF MARKET=
- LACK OF VISION=
- LARGER COMPANIES UNDERCUTTING=
- LOCATING CUSTOMERS=
- LOSS OF MANUFACTURERS IN AREA=
- MAINTAINING CAPITAL=
- MARGINS HAVE DECREASED=
- MARKET=
- MARKET CONDITIONS=
- MARKET ID=
- MARKET SHRINKING=
- MARKETABILITY=
- MARKETING=
- MARKETING COST=
- MORE CUSTOMERS=
- MOVING TO OTHER AREAS=
- MY SKILL=
- NEED FOR SERVICES=
- NEW CLIENT BASE=
- NEW CUSTOMERS=
- NOT ENOUGH RESOURCES=
- ONGOING INSURANCE COST FOR EM...
- OUR TARGET MARKET=
- OUTSOURCING=
- OUTSOURCING PROBLEM TO OTHER ...
- OUTSOURCING TO FOREIGN COMPET...
- OUTSOURCING-OFFSHORE=
- OVERALL COMMERCIAL ECONOMY=
- OVERALL CONTROL OF THE MARKET=
- OVERCOMING CLIENT MISINFORMAT...
- OVERSEAS JOB MARKET=
- OVERSEAS OUTSOURCING=
- PEOPLE DONT KNOW WHAT WE DO=
- PEOPLE WANTING TO SPEND MONEY=
- POLICY RELATED ISSUES-ENERGY=
- PREFERRED VENDOR LIST=
- RESOURCES=
- SALES=
- SALES DEPARTMENT=
- SALES/MARKETING=
- SCHOOL FUNDING=
- SPECIALIZED SOFTWARE-DIFF IN FIE...
- STAY CURRENT W/RESEARCH=
- SUPPLY & DEMAND=
- TARGET CUSTOMER BASE=
- TAX ISSUES=
- TAXES/INSURANCE=
- TECH SERV GIVEN TO OTHER COUNT...
- TECHNOLOGY CHANGES=
- TIME=
- UPLIFT IN PURCHASES IN TECH=

Appendix B

Openings Per Occupation

15-1051.00	Computer Systems Analysts	115
15-1041.00	Computer Support Specialists	95
41-4011.03	Sales Representatives, Electrical/Electronic	75
15-1021.00	Computer Programmers	72
15-1032.00	Computer Software Engineers, Systems Software	63
15-1031.00	Computer Software Engineers, Applications	47
11-3021.00	Computer and Information Systems Managers	34
15-1071.00	Network and Computer Systems Administrators	29
27-3042.00	Technical Writers	21
15-1061.00	Database Administrators	12
15-1081.00	Network Systems and Data Communications Analysts	9
27-1024.00	Graphic Designers	6
41-9041.00	Telemarketers	4
43-4051.00	Customer Service Representatives	4
11-2021.00	Marketing Managers	4
11-2022.00	Sales Managers	4
13-2072.00	Loan Officers	4
51-2022.00	Electrical and Electronic Equipment Assemblers	4
13-1073.00	Training and Development Specialists	3
29-1111.00	Registered Nurses	3
43-4171.00	Receptionists and Information Clerks	3
43-3021.02	Billing, Cost, and Rate Clerks	2
41-2011.00	Cashiers	2
51-9022.00	Grinding and Polishing Workers, Hand	2
51-4011.01	Numerical Control Machine Tool Operators and Tenders, Metal and Plastic	2
49-9052.00	Telecommunications Line Installers and Repairers	2
49-2011.00	Computer, Automated Teller, and Office Machine Repairers	2
13-1071.02	Personnel Recruiters	2
43-5071.00	Shipping, Receiving, and Traffic Clerks	2
43-9199.99	Office and Administrative Support Workers, All Other	2
13-1199.99	Business Operations Specialists, All Other	2
13-2011.01	Accountants	2
49-3021.00	Automotive Body and Related Repairers	1
49-9042.00	Maintenance and Repair Workers, General	1
43-6011.00	Executive Secretaries and Administrative Assistants	1
11-9199.99	Managers, All Other	1
13-1079.99	Human Resources, Training, and Labor Relations Specialists, All Other	1
27-3031.00	Public Relations Specialists	1
43-6014.00	Secretaries, Except Legal, Medical, and Executive	1
41-2031.00	Retail Salespersons	1
43-5061.00	Production, Planning, and Expediting Clerks	1
17-2072.00	Electronics Engineers, Except Computer	1
23-2011.00	Paralegals and Legal Assistants	1
27-1021.00	Commercial and Industrial Designers	1
11-1021.00	General and Operations Managers	1
41-3099.99	Sales Representatives, Services, All Other	1
51-9198.01	Production Laborers	1
33-9032.00	Security Guards	1
41-1011.00	First-Line Supervisors/Managers of Retail Sales Workers	1
43-9011.00	Computer Operators	1

Appendix C
IT-Producing Companies

4 ALL MEMORY
4 POINT COMMUNICATION SERVICE
618 CONNECT
A & W
A TECHNOLOGICAL ADVANTAGE
ABATOR INFORMATION
ABLE COMPUTER SYSTEMS
ABLE PC SYSTEMS INC
ABM COMPUTER
ABM COMPUTER
ABRAHAM TECHNICAL
AC COMPUTER
ACCESS MARKETING
ACCUDATA INC
ACROPOLIS
ACUMEN CONSULTING
ADTECH DESIGNS
ADVANCE COMPUTER
ADVANCED
ADVANCED
ADVANCED COMPUTERS
ADVANCED RETAIL
ADVANCED SYSTEMS
ADVECTA
ADVOCATE PC SVC
AET MEDICAL
A-G LONG DISTANCE
AGMARK
AK SYSTEMS INC
ALION SCIENCE SYSTEMS
ALPHA DATA SYSTEMS
AMD TECHNOLOGY SOLUTIONS
AMDOCS INC
AMER MULLITECH
AMERICAN COMPUTER SERVICE
AMERICAN MEDICAL SOFTWARE
AMTOTE
ANALYSTS INT
ANALYTIX OF
ANDERSON
ANDERSON
APPLE BUTTER
APPLICATION ENGINEERING
APPLIED PERSONAL
APPLIED TRANSPORTATION
ASAP CLERICAL
ASCENT CORP
ASI COMPUTERS
ASK DATA SYSTEMS
ASSOCIATED
AT&T CORP
ATOMICDUST
AUTOMATED TECHNOLOGY
AUTOMATION SERVICE
AVNET CM
BANKCARD PROCESSING INTERNATIONAL LLC
BASSETT INTERNET
BCS COMPUTER
BEEBOPBUB
BEMAS SOFTWARE
BENT MIND CREATIVE
BENTECH INC
BEST BUY
BEST SYSTEMS INC
BITRODE CORP
BIZ CENTRAL LLC
BLAZE COMPUTERS
BLM TECHNOLOGIES
BLUE SKY SVC
BMC SOFTWARE INC
BREWSTER ALEXANDER
BRICK NETWORK
BUSINESS MEDIA INC
BUSINESS RESOURCE
BUSINESS SYSTEMS
BYRNE SOFTWARE
CAD GROUP
CALL PLEX
CAMBRIDGE TECHNOLOGIES
CAPITAL TECHNOLOGY
CARDIFF
CARDINAL BUSINESS
CAT TWO ONLINE
CATALYST

IT-PRODUCING LABOR DEMAND SURVEY REPORT..... WINTER 2004

CENTECH INC
CENTRICS
CENTURION
CENTURY MORTGAGE
CERNER CITATIONS
CERTIFIED NETS
CHAMELEON SOFTWARE
CHECK IT OUT
CHOICE SOLUTIONS
CINGULAR
CINGULAR WIRELESS
CINGULAR WIRELESS
CINGULAR WIRELESS
CLAYTON COMPUTER
CM SYSTEMS
COMMUNITRONICS
COMP & SOFT DATA
COMP USA
COMPOSING ROOM
COMP-U-HELP
COMPUNET INC
COMPUSA
COMPU-SERVICE
COMPUSOLVE
COMPUTATIONS
COMPUTER
COMPUTER AID INC
COMPUTER BUSINESS CONSULTING
COMPUTER CENTER
COMPUTER CONCEPTS
COMPUTER CONSULTING INC
COMPUTER DECISIONS
COMPUTER EXPRESS
COMPUTER FORENSIC
COMPUTER GRAPHICS
COMPUTER MEDIC
COMPUTER MEDICS
COMPUTER PARTNERS
COMPUTER PRO
COMPUTER RENAISSANCE
COMPUTER RENSISSANCE
COMPUTER SERVICES (CSU)
COMPUTER WORKS
COMPUTERS & THINGS
COMPUTER-TOOTER
COMPUTIME INC
COMPUTROL LLC
CONNECTING POINT SUPPORT CENTER
CONNECTRONICS INC
CONNEXUS INC
CORNERSTONE
CSC
CSC CONSULTING
CT INNOVATIONS
CUSTOM MAC
CUSTOM TYPE
CUSTOMER SERVICE INC
CYBEREDGE
CYBERMILL
CYNET INC
CYPRESS SYSTEMS
D&L PRODUCTS
DALEEN TECHNOLOGY
DAR-DE SYSTEMS
DATA 2000 INC
DATA DASH INC
DATA EQUIPMENT SERV
DATA EXPRESS
DATA PAGE
DATA SCIENCE CORP
DATA SCIENCE CORP
DATA TEMPS
DATA UNLIMITED INC
DATALINK CORP
DEBIN INC
DEDICATED LOGISTICS
DEMAND MANAGEMENT INVENTORY
DENNIS TECHNOLOGY
DESIGN IMAGE
DIGITAL CONCEPTS
DIMENSION COMPUTER
DM COMMUNICATIONS
DOWD CREATIVE SVC
DRAZEN IMAGING
DWF COMPUTER ASSOC
DYNAMIC PROCESS
DYNIC LABS INC
E CAMPUS TECHNOLOGY
E PLUS GROUP INC
E PROFESSIONAL SERVICES

IT-PRODUCING LABOR DEMAND SURVEY REPORT..... WINTER 2004

E2L DOT COM INC	GRAYBAR DATA/COMM
EASTMAN REPRODUCTIONS	GSI INC
ECP COMPUTERS	GTM ENTERPRISES
EDS CORP	GUARANTEED OFFICE MACHINES
EFRAME TECHNOLOGY	GW GRAPHICS & DESIGN
ELITE	HABANERO
ELITE PAGING	HARRISONVILLE TELEPHONE
ELLEGENT SYSTEMS	HARTING ASSOCIATES
ELVEEZ.COM	HEATON TECHNOLOGY SERVICES
EMC CORP	HI RESOLUTION
EMERGE INTERACTIVE	HILL COMMUNICATION
EMERGING TECHNOLOGY GROUP	HOLLANDER
ENERGY SOLUTIONS	HOME TELEPHONE
EPSI INC	HOST ANALYTICS
EQUUS COMPUTER	HRH ADVANTAGE
ESRI	HSB RELIABILITY TECH
EXECUTIVE PERSONAL	HTC COMM
EXECUTRAIN	HTC TECHNOLOGIES
EXTREME DATA	HTTP SOLUTIONS
FAST DIRECT COMMUNICATIONS	HUGHES TECHNOLOGIES
FEDERATED SOFTWARE	HURSEY TELECOM INC
FEE SYSTEMS INC	HUSKEY SOFTWARE
FERGUSON CONSULTING	HYPERWARE INC
FHE SVC	I LEVY & ASSOC INC
FIBERNET COMMUNICATIONS	IDEA COM MIDWEST
FIRST CLASS SOLUTIONS	IMAGITRAX
FOEHNER COMPUTER	IMAPS
FORTE COMPUTER SYSTEMS	IN FLOW INC
FOUNDRY SOFTWARE	INFINITE SYSTEMS
FOWLER DATA CO	INFORMATION BUILDERS
FUTUREWARE	INFORMATION INNOVATIONS
GALEN TECHNOLOGIES	INFORMATION MANAGING SOLUTIONS
GALLEON INC	INFORMATION SYSTEM SUPPORTS
GATEWAY COUNTRY	INNOVATIVE CONNECTIONS
GATEWAY COUNTRY	INPUT TECHNOLOGY
GATEWAY POWER	INSTAR CORP
GATEWAY TELEPHONE	INTEGRA GROUP
GATEWAY TO THE WEB	INTEGRATED ID
GBS CONSULTANTS	INTEGRATED NETWORK CABLE
GHIC	INTEGRATION
GIZMO WIRELESS	INTERACTIVE MARKETING
GLA NETWORK	INTERCHANGE
GLOBAL PAYMENTS	INTERCHARGE
GLOBAL SOURCE IT	INTERLOCK RESOURCES
GLOBAL TRANSMEDIA	INTERTECH USA

IT-PRODUCING LABOR DEMAND SURVEY REPORT..... WINTER 2004

INTERTEK SOLUTIONS
IQ TECHNOLOGIES
IT-SC INC
IVY SYSTEMS
J WEB NEW MEDIA
J&B TECHNOLOGIES
J&B WIRELESS
JCN INTERNET
JEFFCO SOLUTIONS
JMC COMPUTER
JOHNSON COMP TECH
JOSEPH CO
JW SOFTWARE
KARPEL COMPUTER
KATY COMPUTER
KELLY MITCHELL
KIRKWOOD AUTO REPAIR
KM NETWORKING
KRUPP TECHNOLOGIES
LAFFEY COMPUTERS
LAFFEY GROUP
LAN LASER
LANSWERS INC
LAPTOP UNIVERSE
LARIMORE
LASER MAX
LASER PACE
LASER PRO
LAUTON SYSTEMS INC
LAWRENCE & ASSOC
LAYCO COMPUTERS
LEVITON
LIBLO INC
LIESMANN INC
LUCENT
LWCD INC
MADISON NETWORK
MARSHALL WIRELESS
MARYVILLE TECHNOLOGIES
MASTER CLOCK
MAV-AIR
MEB CONSULTING SVC
MEDIA RECOVERY INC
MERWYN GROUP
METRO ST LOUIS COMMUNICATIONS LLC
MHE NET
MICHAEL C KEARNEY INC
MICRO CONSULTANTS
MICROCHIPS INC
MID AMERICA WEB
MID AMERICAN ST LOUIS AIRPORT
MIDRANGE COMPUTER
MIDWEST MARKING
MIKEN COMPUTER CO
MILES TECHNOLOGIES
MIS CORP
MITEL
MONARCH OF ST CHARLES
MONFORT LANE
MONTEL CO
MOORE COMPUTING
MOSKOWITZ & CO
MURPHY & CO
NATIONAL PC
NET ENGINEERS
NET PRO INC
NET WISE INC
NETWORK DATA
NETWORK DATA
NETWORK MGR
NETWORK SERVICES & PRODUCTS
NETWORKZ
NEUTRON
NEW CENTURY INC
NEWMETRICS CORP
NEXT CENTURY
NEXTEL
NEXTEL
NEXTEL COMMUNICATIONS
NEXTGEN
NIGHTOWL INTERNET
NISC
NOBS COMPUTER SERVICE
NORCOM 2000
NORTHROP GRUMMAN
NORTHRUP GRUMMOND
NOTEWORTHY WEB
NOVA SOURCE
NT NOW INC
OAKWOOD SYSTEMS

IT-PRODUCING LABOR DEMAND SURVEY REPORT..... WINTER 2004

OBJECT COMPUTING
ONLY LINK
ONSITE SYSTEMS INC
OPTION COMPUTER
PARA DATA FINANCIAL
PARADIGM NEW MEDIA
PARIO INNOVATIONS
PATRIOT MACHINE INC
PC HOUSE
PC HOUSE CALLS INC
PC INNOVATORS
PC PLUS COMPUTERS
PC WEB XPERIENCE
PEAK COMPUTER
PEARL COMPUTER
PERSONAL BEST
PERSONNEL STAFFING
PIASA COMPUTERS
PIASANET
PICO SYSTEMS
PIPKINS INC
POLARIS GROUP
PORTHOS SYSTEMS
PRACTICAL COMPUTER SOLUTIONS
PREFERRED RESOURCES
PREFERRED WIRELESS
PRESTIGE COMPUTERS
PRIMARY CLICK.COM
PRIMARY NETWORK
PRO LIFE COMMUNICATIONS
PRO-COMMUNICATION
PRODUCT DESIGN & DEVELOPMENT CORP
PROFESSIONAL NETWORK SOLUTIONS
PROGRESSIVE DATA
PROTRONICS TECHNOLOGIES INC
Q FLOW SYSTEMS
Q&A BUSINESS
QC SATELLITES
QUALITY PAGE
QUALITY SOFTWARE
QUEST SOFTWARE
QUILOGY
RADIO SHACK
RADIO SHACK
RADIO SHACK
RAISING THE STANDARD
RAM TELECOM
RAWCOM INTERNET SERV INC
RAY LEVI & SHOUP INC
RAYTHEON CO
RCH LTD
RED SKY WIRELESS
RED SKYE WIRELESS
RE-POSITION LLC
RHODES DATA
ROADSIDE SYSTEMS
ROSE INTERNATIONAL
ROSE SOFTWARE CO
RUSSELL TECHNOLOGIES
RZ SOLUTIONS
SANCHEZ & ASSOC
SAVVIS COMM
SAYERS FORTY
SBA COMPUTERS INC
SCHAEFER SOFTWARE
SCHOOL INFORMATION SYSTEMS
SECR TELCOM
SEI CO
SELF-IMAGING
SELLMEYER INC
SENDX
SEXTANT COMPUTER
SHOW-ME ONLINE
SIBONEY LEARNING
SIBONEY LEARNING GROUP
SIERRA SOLUTIONS
SIGNAL TELEPHONE
SITEK MARKETING
SMALL BUSINESS COMPUTERS
SMARTPHONE WIRELESS
SOFTWARE & SYSTEMS
SOFTWARE APPLICATION PROFESSIONALS INC
SOFTWARE CENTER
SOFTWARE CORP
SOFTWARE RESULTS
SOFTWARE TO GO
SOLVENT SYSTEMS
SOSESO INC

IT-PRODUCING LABOR DEMAND SURVEY REPORT..... WINTER 2004

SOWARD MOTORS
SPARKS COMMUNICATIONS
SSM INFORMATION CENTER
STAR COMPUTERS
STAUDER TECHNOLOGIES
STOCKELL CONSULTING
STOCKELL HEALTH
STOPKA & ASSOC
STRATEGIC TECH GROUP
STROCO INC
STRUCTURE WISE INC
SUMARIA SYSTEMS
SUPPORT FIRST
SWIFTECHS
SWIFTECHS
SYKES ENTERPRISES
SYMBOL TECHNOLOGIES
SYNAC SOFTWARE
SYNERGY
SYS PROG INC
SYSTEM DESIGN
SYSTEMS SERVICE
TABLE MOUNTAIN
TCA VOICE & DATA
TDK TECHNOLOGIES
TEAM CREATIONS
TECH GUARD
TECHCENTRIC
TECHNICAL SUPPORT
TECHNISOURCE
TECHNO SMARTS INC
TECHNOLOGY EXPRESS
TECHNOLOGY PARTNERS
TECHNOLOGY SOLUTIONS INC
TECHS ON WHEELS
TEKKEK SYSTEMS
TELCOM QUALITY
TELCOM SERVICES
TELECOM DESIGN SOLUTIONS
TELEOLOGIC
TELESCAN CORP
THE COMPUTER SUPPORT GROUP INC
THE WRITE SOLUTION
TILLMAN COMPUTER
TOTAL COMPUTER
TOTAL STAFFING SOLUTIONS
TOUCHWOOD INC
TOWER 29 MEDIA
TOWERHOUSE
TRACKER DESIGNS LLC
TRANS CENTRIC
TRI STAR BENEFIT SYSTEM
TRI-COR INDUSTRIES
TRIPOS INC
TURNKEY TECHNOLOGIES
ULTRA TECH
UNGERBOECK SYSTEMS
UNIBASED SYSTEMS
UNICON GROUP LTD
UNIFIED DEVELOPMENT
UNISYS CORP
UNITED TECHNOLOGY CORP
VALCOM BUSINESS
VGRAPHIX
VIOMAX INC
VIRTUAL DESIGN
VOICE & DATA
WDT SOLUTIONS
WEB SWAT TEAM
WELLSPRING
WESTPLEX INFORMATION NETWORK
WHITE HORSE
WHOLESALE LASERS CO
WHOLESALE TELECOM
WILLIAM BYRNE AND ASSOC
WISDOM WORKS INC
WORD PRO SYSTEMS
WRIGHT
X POND
XYQUAD INC
ZOMAX INC

Labor Demand Survey of Information Technology Companies

Interviewer: _____

Name of Person Interviewed: _____ Phone: _____

Company : _____

This is _____. I am calling on behalf of the University of Missouri at St. Louis, Public Policy Research Center. We are gathering data on workforce issues related to Information Technology Companies in the St. Louis area. Our goal is to identify anticipated employment needs in the industry to help ensure the availability of qualified labor in the future. I was wondering if I could speak with *someone in your organizations who is familiar with your organization's employment needs (YOU)* to discuss a few some of the issues related to the development of this facility.

ONCE YOU ARE CONNECTED WITH THE APPROPRIATE PERSON REREAD THE INFORMATION ABOVE SUBSTITUTING THE WORDS IN ITALICS WITH A YOU>≅

Does your company manufacture any products or provide any services that employ processes, methods or technologies that could be considered Information Technologies?

IF YES, CONTINUE

IF NO, END INTERVIEW

WOULD YOU HAVE ABOUT FIVE MINUTES TO ANSWER A FEW QUESTIONS ABOUT YOUR FIRMS WORKFORCE NEEDS?

IF THE RESPONDENT HAS TIME NOW: Go to question #1

IF THE RESPONDENT IS BUSY: **Could I Fax you a copy of the interview to complete?**

Fax Number: _____

Part I. Market Condition of Company and Industry.

I'm going to begin by asking you a few general questions about your company.

1. *In what year was your company (or operation/department) founded?*

2. *What is your primary product(s) or service(s)?*

3. *What proportion of your product or service is sold*

_____(1) In the St. Louis region

_____(2) Outside the region in the US

_____(3) Outside the US

4. What proportion of your goods or materials are supplied

- ___ (1) In the St. Louis region
- ___ (2) Outside the region in the US
- ___ (3) Outside the US

5. During the past year, have your sales:

- ___ (1) Increased sharply (increased 15% or more)
- ___ (2) Increased modestly (increased 3 to 14%)
- ___ (3) Stayed about the same (-3% to +3%)
- ___ (4) Declined modestly (dropped by 4% to 14%)
- ___ (5) Declined sharply (dropped 15% or more)
- ___ (9) Don't know

6. How would you rate YOUR COMPANY'S financial health/profitability?

- ___ (1) Excellent
- ___ (2) Very Good
- ___ (3) Good
- ___ (4) Fair
- ___ (5) Poor
- ___ (9) Don't Know

7. What are the expectations for your company's sales growth in the coming year?

- ___ (1) Grow strongly (+15% or more)
- ___ (2) Grow modestly (+4% to +9%)
- ___ (3) Stay about the same (-3% to 3%)
- ___ (4) Decline modestly (-4% to -14%)
- ___ (5) Decline sharply (-15% or more)
- ___ (9) Don't Know

8. What are the expectations for your company's growth over the next five years?

- ___ (1) Grow strongly (+15% or more per year)
- ___ (2) Grow modestly (+4% to +9% per year)
- ___ (3) Stay about the same (-3% to 3% per year)
- ___ (4) Decline modestly (-4% to -14% per year)
- ___ (5) Decline sharply (-15% or more per year)
- ___ (9) Don't Know

9. How would rate the financial health/profitability of your company's INDUSTRY?

- ___ (1) Excellent
- ___ (2) Very Good
- ___ (3) Good
- ___ (4) Fair
- ___ (5) Poor
- ___ (9) Don't Know

10. Which ONE of the following do you see as your company's greatest challenge to

continued growth for your company? (Check One)

- (1) Adequate facilities
- (2) Access to capital
- (3) Availability of qualified labor
- (4) Government regulation
- (5) Slow research developments
- (6) Lack of technological innovations
- (7) Lack of local suppliers
- (8) Inadequate transportation
- (9) Other: _____
- (10) Don't Know

11. How many employees does your company CURRENTLY employ in the St. Louis metropolitan area?

_____ employees

12. How many employees did your company employ in the St. Louis area one year ago?

_____ employees

13. How many employees do you think your company will employ in the St. Louis area one year from now?

_____ employees

14. How many employees do you think your company will employ in the St. Louis area five years from now?

_____ employees

15. How does your company currently recruit employees? (Check all that apply.)

- (01) Newspaper
- (02) Employment Agencies
- (03) Job fairs
- (04) High Schools
- (05) Recruiters
- (06) State employment agencies
- (07) Colleges and Universities
- (08) Trade Publications
- (09) In-House Promotion
- (10) Referrals/Word of Mouth
- (11) Internet
- (12) Other _____

16. Does your company current have any job openings?

___(1) Yes

___(2) No

If Yes:

16a. Approximately how many different types of job openings do you have? _____

In order to help us identify the employment needs of companies in the life and plant sciences industry in the St. Louis Area, we have a short, 1-page questionnaire that we would like to fax you about your current job openings. Would you be willing to complete the questionnaire if I sent it to you it to you later today?

If yes, what is your fax number: _____

17. What is you mailing address:

Street: _____

City: _____ State: _____ Zip: _____

Thank you for your time, this concludes the survey

This report, *Survey of Job Openings in the IT-Producing Sector*, summarizes the results of the fourth Sector Labor Demand Analysis conducted by the Public Policy Research Center (PPRC) as part of the Workforce Information System (WIS). This system has been developed and is being maintained by the Metropolitan Information and Data Analysis Services (MIDAS) section of the PPRC at the University of Missouri – St. Louis. The WIS is a long-term project with far-reaching utility for workforce development in the St. Louis region. By providing more timely and consistent labor market demand information, the WIS provides training and employment organizations and education institutions with information that can assist in planning the workforce preparation of workers and students. The information compiled in the WIS is centered on current estimates of occupation demand and a current picture of the changing skills and job requirements of those occupations. This information is assembled through an extensive survey of local businesses throughout the two-state, twelve county region. Supporting and complementing this information is data on regional and county economies, demographics, labor force composition and profiles of the education, training and employment communities. This information is utilized by a wide range of workforce development agencies and education bodies including:

- Training and employment entities
- Colleges and universities
- K-12 school districts
- State one-stop career centers
- Vocational education centers
- Economic development agencies
- Workforce development departments
- Human Resources departments
- Community organizations

Although labor-related economic indicators such as the unemployment rate, the level of employment and new job creation have been used to measure and track the local economy and labor force, they do not have direct utility for planning workforce development. Likewise, existing occupation projections lack information about the skill, education and experience requirements that are necessary for training program and education curriculum planning. The WIS provides this necessary information through a bi-annual survey of local industries that focus on labor demand and the necessary skill, education, and experience requirements. In this way, the planning and allocation of training and education resources can be directed toward the preparation of workers and students for occupations that have an identified current demand. It also informs those entities on occupation specifics such as math and reading level requirements, worker personal attributes, education requirements and desired years of experience. This summary of the *Survey of Job Openings in IT-Producing Sector* provides a quick snapshot of current labor market demand in the St. Louis region.

IT-PRODUCING LABOR DEMAND SURVEY REPORT..... WINTER 2004

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