



Market Analysis

What Business Needs

St. Louis Region Information Technology Labor Market

Custom Research Report

Period Covered: April-May 2008

Deanna Hampton, Dan DeMaioNewton, Gerard Euell & Jeff Quinn

MGS Insights and Analysis

The St. Louis Regional Information Technology Labor Market Report delivers insights and analysis of Information Technology (IT) skills and competencies most in demand by St. Louis area employers to help answer the question: What does business need? This research is designed to assist key stakeholders involved in economic and workforce development, St. Louis business, educational, and employment services communities in the development of education and training programs to ensure that the region's workforce is well-prepared and equipped to meet business' IT demands.

Critical Insights

- St. Louis demand for IT talent declined in May 2008 and may be tied to moderation in the job market resulting from softer economic outlook. As a result of the nationwide economic conditions, St. Louis may experience decreased IT demand in upcoming months.
- Although the demand for IT talent is decreasing, employers are not shifting from full-time to contract labor. For the period, the percentage of full-time workers decreased by 1%.
- The region currently has a talent surplus of Support Specialists, and IS Managers, but has no IT talent deficits. Systems Analysts and Applications Software Engineers are in the high performance zone with strong demand and talent supply.
- The top three increases in demand for IT talent during this period in the region is for:
 1. Computer Software Engineers, Systems Software (+28%)
 2. Computer Software Engineers (+23%)
 3. Computer Systems Analysts (+15%)
- The top 3 decreases in demand for IT talent in the region for this period:
 1. Operations Research Analysts (-48%)
 2. Computer Hardware Engineers (-46%)
 3. Data Entry Keyers (-39%)
- The top 3 greatest increases in demand in IT job titles in Apr-May are for:
 1. IS Shift Supervisors (+250%)
 2. Java Developer – Entry Level (+175%)
 3. Sr. ASP Developer (+100%).

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- The top 3 greatest decreases in demand for IT job titles are for:
 1. Senior Software Engineers (-34%)
 2. Software Engineer (-29%)
 3. C/C++ Programmer (-21%).
- The top 3 computer programming job titles in demand in the region are for:
 1. Senior ASP Developers
 2. C/C++/C# Programmers
 3. JAVA Developers.
- Employers increasingly mentioned development, design, code, and maintenance in their desired Hard Skills, and decreased mentions of administration, security and database.
- SQL, Microsoft, Oracle, JAVA, UNIX and Windows are the top technical skills in demand by employers.
- Service and leadership are key IT soft skills in demand in the region.
- Salaries are increasing fastest for "hard" skill areas of Software/System Architecture, Network and Server Administration, and Database Development/Administration, and decreasing for Production/Operations and Desktop Service and Support.

Research Methodology

The data for this report was derived from Monster.com's jobs and resumes database for the period of April and May 2008. This period was used to provide St. Louis stakeholders with the best real-time assessment of critical IT knowledge, skills, and abilities in most-demand to assist in the development of programs to ensure the region can best meet business' IT needs.

Over 2,000 Monster job postings matching the St. Louis Regional Chamber and Growth Association's (RCGA's) definitions for IT jobs were included in this analysis. These jobs were from postings to Monster.com in the St. Louis area – defined as a 45-mile radius around St. Louis - that matched the characteristics of the RCGA's list of 19 IT Occupations of Interest.

RCGA IT Occupations of Interest

- Computer and Information Scientists, Research
- Computer and Information Systems Managers
- Computer, Automated Teller, and Office Machine Repairers
- Computer Hardware Engineers
- Computer Operators
- Computer Programmers
- Computer Software Engineers, Applications
- Computer Software Engineers, Systems Software
- Computer Specialists, All Other
- Computer Support Specialists
- Computer Systems Analysts
- Data Entry Keyers
- Database Administrators
- Network and Computer Systems Administrators
- Network Systems and Data Communications Analysts
- Operations Research Analysts
- Computer Science Teachers, Postsecondary
- Telecommunications Equipment Installers and Repairers, Except Line Installers
- Telecommunications Line Installers and Repairers

Monster's resume database contains more than 200,000 active job seekers in the St. Louis region, with an average of 10,000 new resumes added each month. An active job seeker is defined as a seeker that has been created, updated or logged into their account within the past 24 months.

More than one million job searches are performed on Monster.com each month for jobs in the St. Louis area. A job search is defined as a user that performs an initial query, refinement or subsequent page query. Location searches within St. Louis are conducted in one of 3 ways: via a zip code (25%), city name (46%), or area/region (29%).

Job seekers have created more than 445,000 job search agents for the St. Louis region to be proactively notified of jobs matching their interests (82%) or return to Monster to run them on demand (18%).

St. Louis Overall Workscope

To establish the performance and demand in the IT sector in greater St. Louis, we have included the following workscape summary to contextualize IT sector demand. On a national scale, the St. Louis metropolitan area has seen payrolls grow at a consistently slower pace than the national average during the past 3+ years. The region's unemployment rate continues to be higher than the national average.

The St. Louis jobless rate made an encouraging move downward in April after languishing above 6 percent through the first 3 months of 2008. The up and down movements of the St. Louis labor market indicators conform with seasonal trends, but volatility has been elevated during the past 6 months. Regardless of this volatility, the labor market in St. Louis remains softer than the nation as a whole.

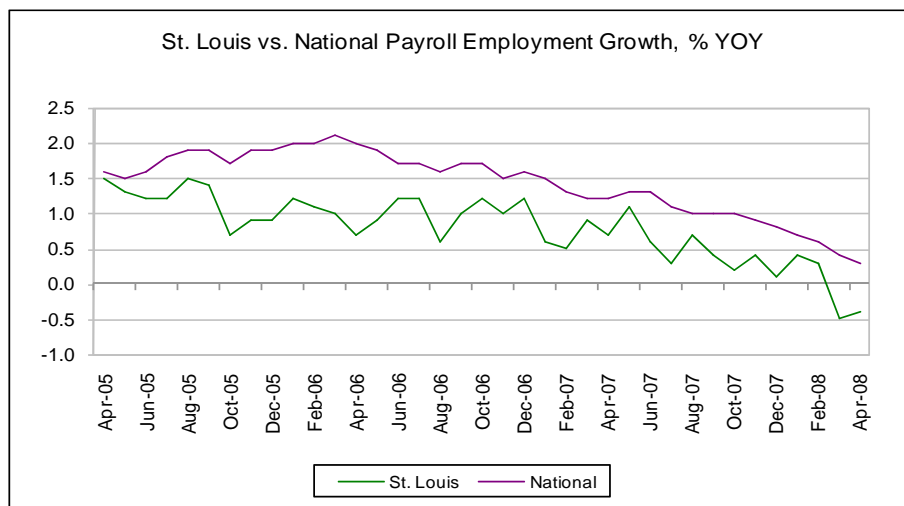


Figure 1. St. Louis' employment growth trails national average.

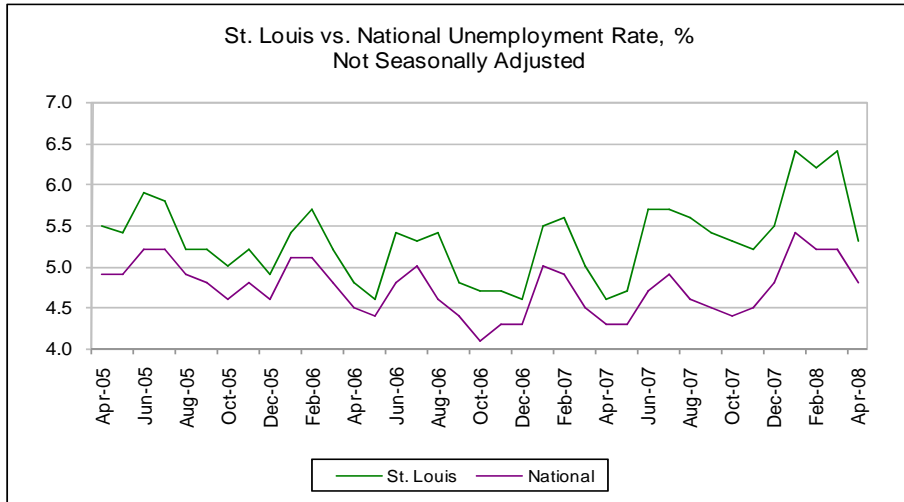


Figure 2. St. Louis' unemployment rate exceeds the national average.

The number of jobs posted to Monster.com from the St. Louis region continues to exceed the number of resumes posted over the past 2 years suggesting greater demand than supply. The number of resumes has declined over the past 3 months perhaps as a result of fears of recession set in with employees. Since the end of the Q1 2008 the number of job postings has started to report similar slowdowns in activity.

In April and May 2008, new resumes have dipped 6% over a year ago 2007 as job postings showed larger moderations in activity dropping 14% over the same period.

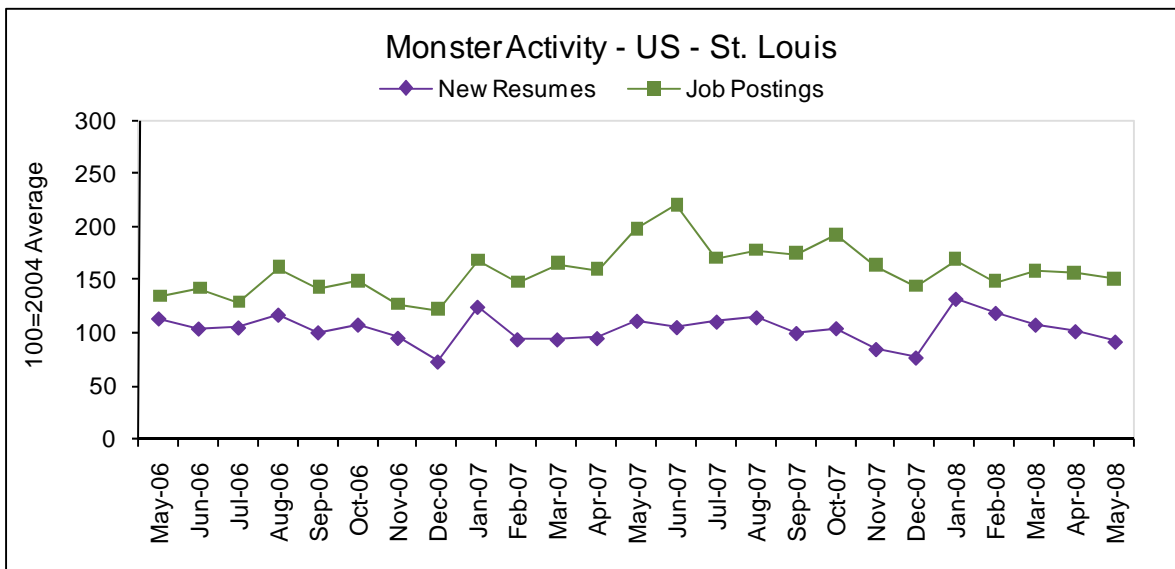


Figure 3: St. Louis' Overall Workspace Shows Consistent Demand Outpacing Talent Availability

St. Louis Area IT Performance

The Monster Employment Index (MEI) tracks performance for overall regional workscapes drawn from over 1,500 online job sites. The MEI is one of the best indicators for job demand and is included in the workscape overview to establish the context for IT demand in the St. Louis regional area.

Overall job demand in the St. Louis market has grown substantially over the past 3 years. However, there has been almost zero net growth in the past year.

While job posting trends for the metro-area’s Computer and Mathematical (IT) occupations have historically followed the up/down trends of the metro area as a whole, volatility in IT recruitment activity over the past 12 months continues to be more tempered than for the metro area as a whole. This suggests a more calculated hiring strategy for IT talent.

May 2008 has seen a decline in both IT and overall job postings, largely tied to moderation in the job market resulting from a generally softer economic outlook. As a result, St. Louis may experience fewer demand for both overall and IT recruitment for the upcoming months.

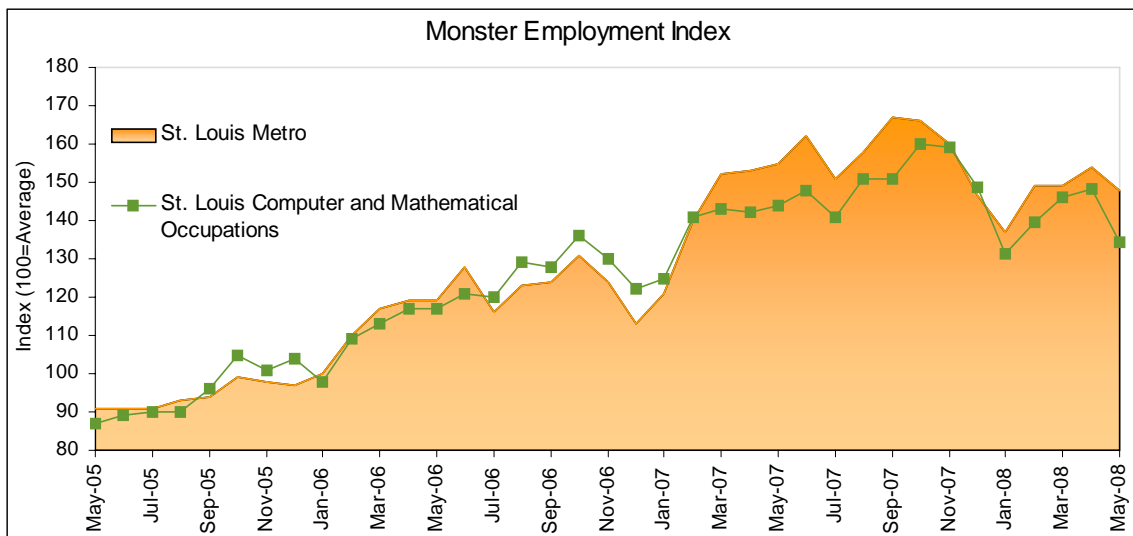


Figure 4: Demand for IT Talent Slows in the St. Louis Region

The number of IT job postings in the St. Louis region continues to exceed the number of new resumes being posted for each of the past 12 months. This indicates a continued demand rate higher than talent availability.

April and May 2008 reported a slowing rate of new IT resume growth in St. Louis, decreasing 9% over the same period 2007. Still, there are more than 30,000 active IT job seekers in the St. Louis area.

IT job postings stalled slightly as well in the St. Louis region dipping 4% over the same period.

These declines are primarily due to slower activity in May and reflect similar reports from the Monster Employment Index.

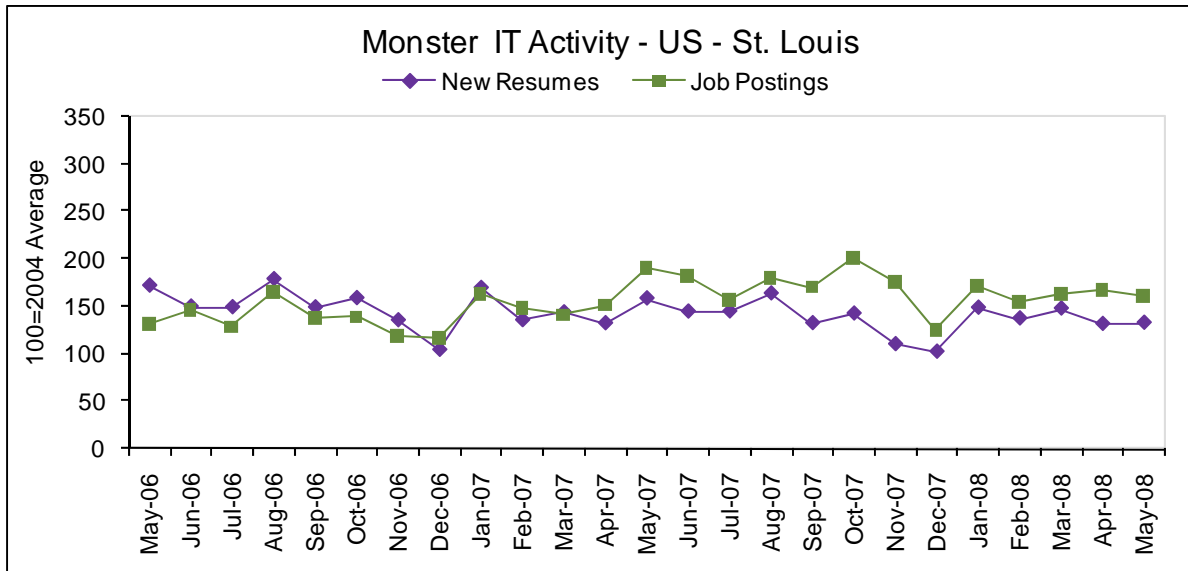


Figure 5: Job Postings in IT for the St. Louis Region Outpace Talent Availability

St. Louis Region IT Occupational Demand

The top 5 IT occupations in demand in the St. Louis region are (in order of demand):

1. Computer Software Engineers, Application (20%)
2. Computer System Analysts (19%)
3. Computer Programmers (12%)
4. Network and Computer Systems Administrators (9%)
5. Computer Software Engineers, Systems Software (7%).

The order of demand for the top 5 is unchanged from the same period 2007. Demand has increased for Computer Systems Analysts, Network and Computer Systems Administrators, and Computer Software Engineers, Systems Software. On the contrary, the need for Computer Software Engineers, Applications and Computer Programmers has slowed over the same period.

What Business Needs

The greatest increases in demand for IT are in the following occupations: *

1. Computer Software Engineers, Systems Software (+28%)
2. Computer Software Engineers (+23%)
3. Computer Systems Analysts (+15%)
4. Network & Computer Systems Administrators (+14%).

The greatest decreases in demand for IT are in the following occupations: *

1. Operations Research Analysts (-48%)
2. Computer Hardware Engineers (-46%)
3. Data Entry Keyers (-39%)
4. Computer Support Specialists (-39%)
5. Telecom Equipment Install & Repair, Except Line Installers (-38%)
6. Computer and IS Managers (-18%)
7. Computer Programmers (-13%)
8. Computer Software Engineers, Applications (-11%)
9. Network Systems and Data Communication Analysts (-8%)
10. Database Administrators (-5%).

*Note: Six of the IT occupations reported fewer than 15 job postings in April-May 2008 and are excluded because they do not present enough data to draw conclusive results.

The table below summarizes occupational demand and growth rates.

IT Standard Occupations in Demand in St. Louis - Highest Volume, Apr-May 2008

IT Standard Occupations	% of 2008 Postings	% of 2007 Postings	YoY Volume Change
Comp SW Eng, App	20%	20%	-11%
Comp Sys Analysts	19%	15%	15%
Computer Programmers	12%	13%	-13%
Network & Comp Systems Admins	9%	7%	14%
Computer Support Specialists	7%	10%	-39%
Comp SW Eng, Systems SW	7%	5%	28%
Database Administrators	5%	5%	-5%
Comp and IS Managers	5%	6%	-18%
Network Sys & Data Comm Analysts	3%	3%	-8%
Computer Hardware Engineers	3%	4%	-46%
Computer Software Engineers	2%	2%	23%
Telecom Equip Inst & Rep, Ex Line Inst	2%	3%	-38%
Data Entry Keyers	1%	2%	-39%
Operations Research Analysts	1%	2%	-48%
Comp, Auto Tell, & Off Mach Repairers*	1%	0.2%	160%
Computer Operators*	1%	1%	-15%
Comp Science Teachers, Postsecondary*	0.2%	0.0%	400%
Comp and IS, Research*	0.2%	0.3%	-17%
Computer Specialists, All Other*	0.2%	0.4%	-56%
Telecom Line Installers & Repairers*	0.0%	0.0%	0%

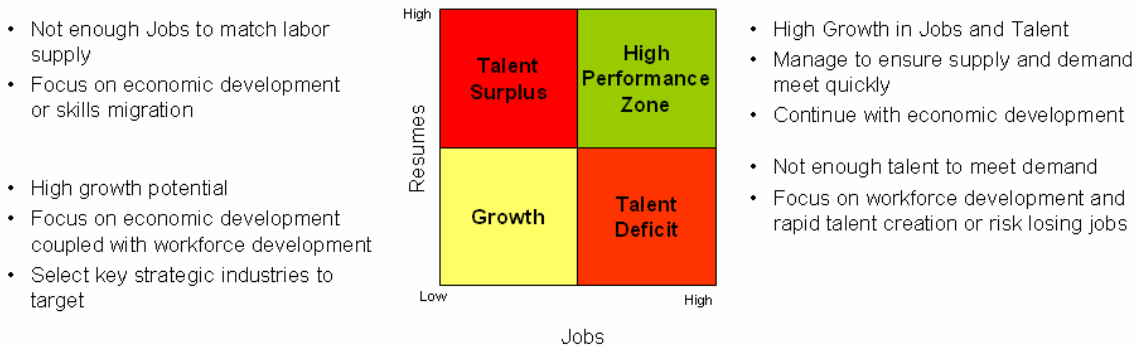
*Occupations with less than 15 available job postings within the St. Louis market

Figure 6: Summary of St. Louis Regional Occupational Demand

St. Louis IT Occupation Supply and Demand Analysis

The Labor Performance Matrices below analyze the St. Louis region’s performance in the Information Technology Sector and subsectors. The Market scorecard tracks jobs and resumes determining key performance for the sector. The figure below summarizes how to read the matrices. The size of the circles represents the demand based on the ratio of resumes per job. A larger circle indicates large demand for talent, and a smaller circle represents a smaller demand for talent.

**The Monster Government Solutions
Labor Performance Matrix**



We separated the supply and demand analysis into Technical and Administrative categories for ease of analysis and review.

In the Technical analysis the St. Louis region is currently in high performance for Software Engineers, Applications. This indicates that there is a strong supply and demand for these positions. The Programmer occupation is overlapping the Incubator and Talent Deficit zone. The region should continue to track performance in this job category to ensure that there is an adequate pipeline of talent to meet the demand. Programmers are in third highest demand currently, behind Software Engineers, Applications and Software Engineers, Systems Software.

Software and Hardware Engineers, Software Engineers, Systems Software are in the incubator zone. Software Engineers, Systems Software is experiencing the greatest demand and has the greatest opportunity to move towards the high performance zone if the economic momentum continues and an adequate labor force is cultivated.

There are currently no job areas in the Talent Surplus zone for IT Technical jobs in the St. Louis region. This may pose a future risk if there is a need for transferable skills across occupational boundaries.

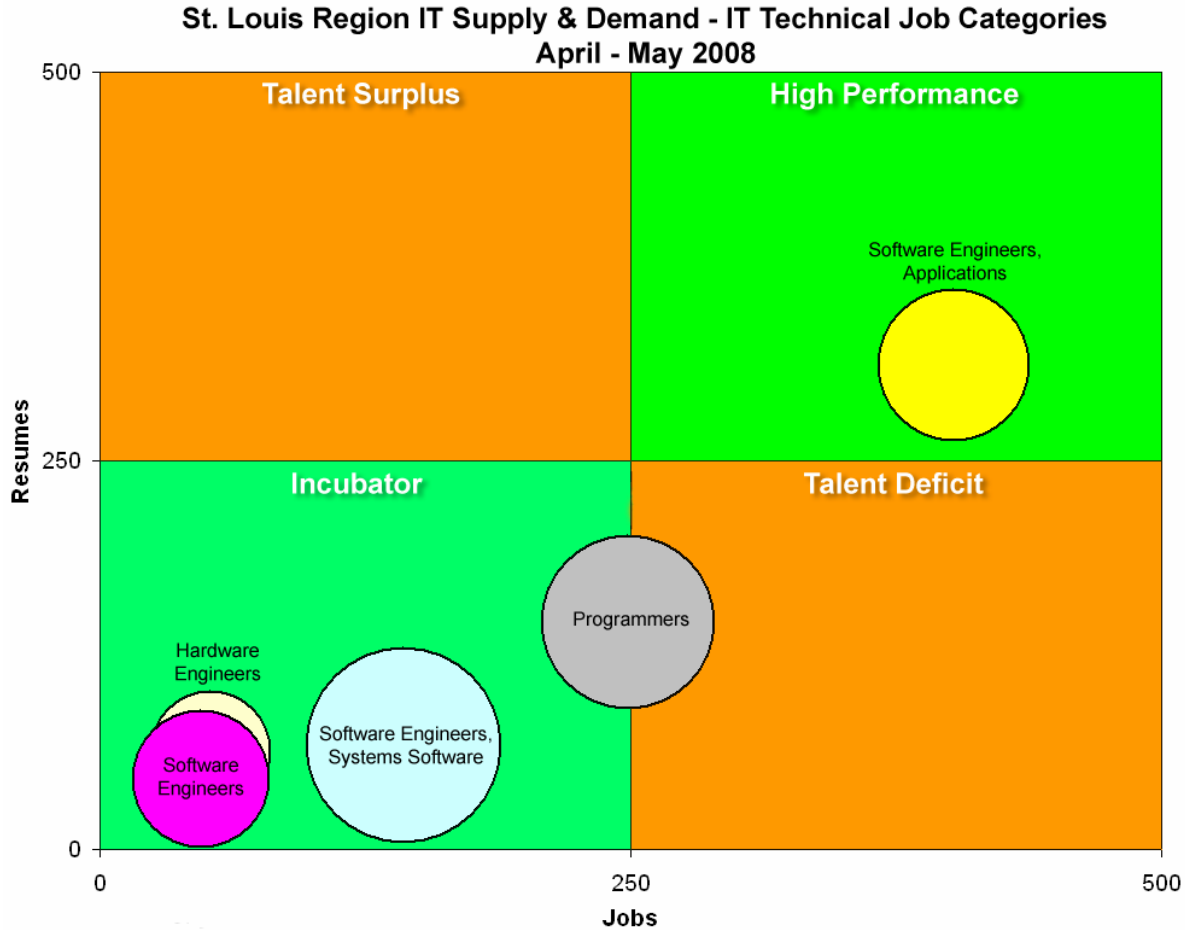


Figure 7. There is strong supply and demand for Software Engineers, Applications in the St. Louis region, and several opportunities to grow the IT technical sector.

In the IT Administrative area for the St. Louis region, the picture is quite different. The region currently has no sector subcategories in the talent deficit zone. This indicates that employers are able to find the sufficient talent they require to fill their positions.

Systems Analysts are currently the only IT subsector in the high performance zone. There exists an adequate supply and demand in this area to meet employer and job seeker demands.

Support Specialists and Information Systems Managers are in the Talent Surplus zone. One action to consider is developing workforce development programs to assist workers in these IT subsectors to develop skills to be able to perform more of the technical skills in the previous graph, especially in high performance or incubator areas. Alternatively, the region should focus on economic development to attract employers who heavily utilize these skills to the region, using a strong talent supply as a key attractor.

Network Systems & Data Communications Analysts and Database Administrators are in the incubator regions and should be considered as key opportunities for growth, especially Database Administrators – who are currently experiencing strong demand.

**St. Louis Region IT Supply & Demand - IT Administrative Jobs
April - May 2008**

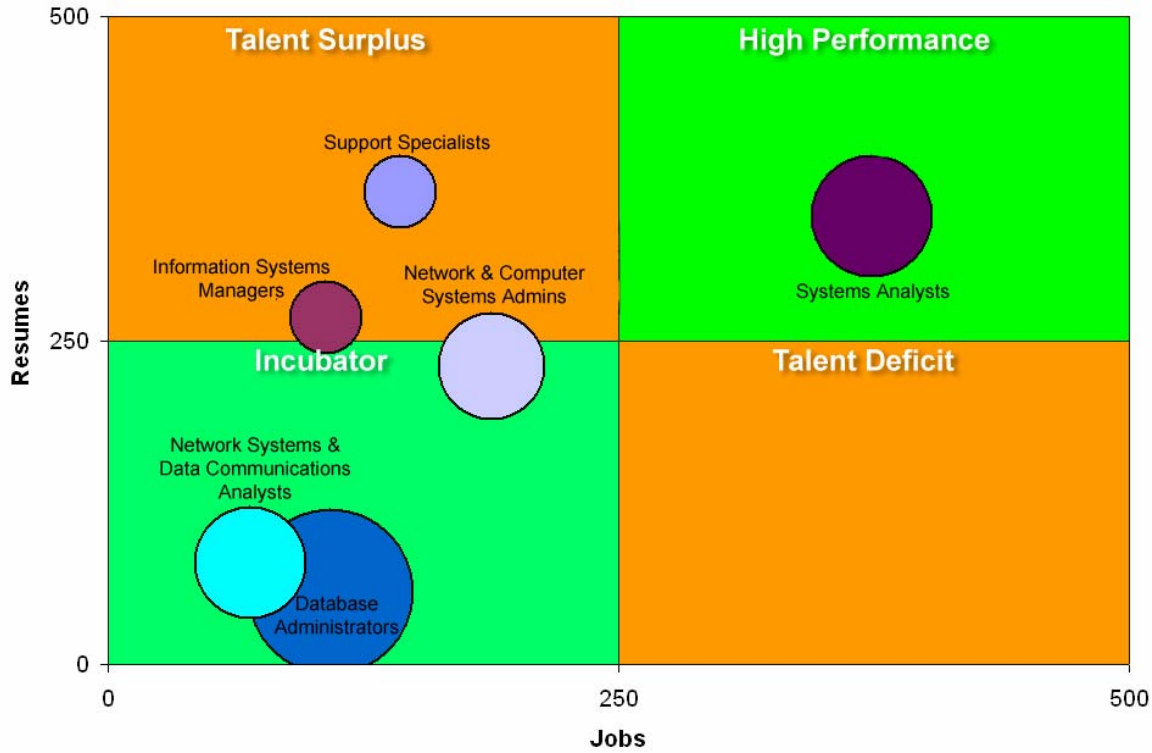


Figure 8: The talent surpluses in the IT Administrative area present an opportunity for economic development and attracting new businesses to the region.

St. Louis IT Job Titles

We examined the job titles of over 2,000 jobs posted in IT on Monster.com for the April - May 2008 period to determine the jobs in highest demand.

Although Business Systems Analysts remain the highest IT occupation in demand through April 2008 and May 2008, posting activity dipped 17% year-over-year (YoY). The next 3 highest demand jobs were Sr. ASP Developers with an increase YoY of 100%, followed by C/C++ Programmers, that has dropped -21% YoY, and Information Systems Shift Supervisors with a 250% rise over the past year.

The greatest increases among the largest job titles in demand in St. Louis were for:

1. Information Systems Shift Supervisor (+250%)
2. Java Developer – Entry Level (+175%)
3. Sr. ASP Developer (+100%)
4. Software Quality Assurance Analyst (+69%)
5. Information Technology Manager (+67%)
6. UNIX Administrator (+62%)
7. Software Quality Assurance Engineer (50%)
8. Systems Administrator (47%)
9. Java Architect (+43%)

What Business Needs

The greatest decreases in demand are for the following job titles:

1. Senior Software Engineer (-34%)
2. Software Engineer (-29%)
3. C/C++ Programmer (-21%)

Top 20 Monster Occupations in Demand - Highest Vol., St. Louis, Apr-May 2008

Rank	Monster Occupations	YoY Change
1	Business Systems Analyst	-17%
2	Sr. ASP Developer	100%
3	C/C++ Programmer	-21%
4	Information Systems Shift Supervisor	250%
5	Java Developer	14%
6	Sr. Software Engineer	-34%
7	Software Engineer	-29%
8	Sr. Programmer Analyst	-14%
9	Software Quality Assurance Engineer	50%
10	Technical Support Specialist	14%
11	Java Developer - Entry Level	175%
12	Software Quality Assurance Analyst	69%
13	Systems Administrator	47%
14	Hardware Test Engineer	22%
15	UNIX Administrator	62%
16	Information Technology Manager	67%
17	Java Architect	43%
18	AS/400 Programmer Analyst	5%
19	Web Applications Developer	-9%
20	Technical Support Engineer	-10%

Figure 9: Top IT Job Titles in Demand in St. Louis

What Business Needs

The top Computer Software (SW) Engineering (Applications) job titles in demand in St. Louis are:

1. Sr. Software Engineer (9%)
2. Software Engineer (9%)
3. Sr. Programmer Analyst (8%)

Top Computer SW Engineers (Applications) in Demand - High.Vol., St. Louis, Apr-May 2008

Rank	Monster Occupations	% of Postings	YoY Change
1	Sr. Software Engineer	9%	-34%
2	Software Engineer	9%	-29%
3	Sr. Programmer Analyst	8%	-14%
4	Java Architect	5%	43%
5	Web Applications Developer	5%	-9%

Figure 10: Top SW Eng (Applications) Roles in Demand in St. Louis

The top Computer Systems Analysis job titles in demand in St. Louis are:

1. Business Systems Analyst (26%)
2. Information Systems Shift Supervisor (16%)
3. Software Quality Assurance Analyst (7%)

Top Computer Systems Analysts in Demand - High.Vol., St. Louis, Apr-May 2008

Rank	Monster Occupations	% of Postings	YoY Change
1	Business Systems Analyst	26%	-17%
2	Information Systems Shift Supervisor	16%	250%
3	Software Quality Assurance Analyst	7%	69%
4	Lead Programmer Analyst	6%	70%
5	Sr. Systems Analyst	5%	-62%

Figure 11: Top Computer Systems Analyst Roles in Demand in St. Louis

The top Computer Programming job titles in demand in St. Louis are:

1. Senior ASP Developers
2. C/C++/C# Programmers
3. JAVA Developers

Top Computer Programmers in Demand - High.Vol., St. Louis, Apr-May 2008

Rank	Monster Occupations	% of Postings	YoY Change
1	Sr. ASP Developer	27%	100%
2	C/C++ Programmer	21%	-21%
3	Java Developer	16%	14%
4	Java Developer - Entry Level	9%	175%
5	AS/400 Programmer Analyst	8%	5%

Figure 12: Top Computer Programmer Roles in Demand in St. Louis

St. Louis IT Educational Requirements

68% of the IT opportunities in St. Louis required a bachelor’s degree. 1% required a Masters degree. 5% required an Associates degree, and 15% required high school or equivalent education. 75% of IT job postings in St. Louis did not report a required education level and were not included in the education requirement analysis.

With the exception of computer support specialists, network & computer systems administrators, telecom equipment installers and repairers, except line installers and data entry keyers the majority of IT occupations require at least a bachelor’s degree.

Operations research analysts required the most advanced education, with 20% of the opportunities requiring a Masters degree.

Data Entry Keyers and Telecom Equipment Installation and Repair required the highest percentage of High School or equivalent education.

The table below summarizes educational requirements by occupation.

Education Level Requirement of IT Candidates on Monster - St. Louis, Apr-May 2008

Job Posting Education Requirement	Masters Degree	Bachelors Degree	Associate Degree	Some College Coursework	High School or equivalent	Some HS Coursework	Professional	Certification	Vocational
All IT Job Postings	1%	68%	5%	3%	15%	0%	5%	1%	1%
Comp SW Eng, App	2%	81%	5%	2%	7%	0%	3%	0%	1%
Comp Sys Analysts	0%	66%	6%	3%	24%	0%	1%	0%	0%
Computer Programmers	0%	71%	5%	2%	11%	0%	11%	0%	0%
Network & Comp Systems Admins	2%	48%	4%	8%	18%	0%	14%	2%	4%
Comp SW Eng, Systems SW	0%	89%	3%	3%	0%	0%	3%	3%	0%
Database Administrators	0%	63%	4%	0%	21%	0%	8%	4%	0%
Computer Support Specialists	0%	50%	11%	11%	28%	0%	0%	0%	0%
Computer and IS Managers	9%	61%	4%	0%	26%	0%	0%	0%	0%
Computer Hardware Engineers	0%	86%	14%	0%	0%	0%	0%	0%	0%
Network Sys & Data Comm Analysts	0%	82%	0%	6%	0%	0%	6%	6%	0%
Telecom Equip Inst & Rep, Ex Line Inst	0%	29%	7%	0%	57%	0%	0%	7%	0%
Computer Software Engineers	0%	86%	14%	0%	0%	0%	0%	0%	0%
Operations Research Analysts	20%	60%	0%	0%	0%	20%	0%	0%	0%
Data Entry Keyers	0%	20%	0%	0%	60%	0%	20%	0%	0%

*Occupations with less than 15 available job postings within the St. Louis market were excluded

Figure 13: Educational Requirements by IT Occupation

St. Louis IT Career Level Requirements

The majority of IT occupations are seeking mid-career level candidates in St. Louis. 81% of IT opportunities in St. Louis are seeking mid-career level candidates. Only 7% seek Entry Level candidates.

Computer and information systems management opportunities are also looking for a higher percentage of experienced managers compared to all other occupations in St. Louis.

39% of the Computer Support Specialist positions sought entry level talent. There were very few opportunities for candidates with only a high school diploma.

11% of IT job postings in St. Louis did not specify a career level and were not included in the career level analysis.

The table below summarizes experience requirements by occupation:

Career Level Desired of IT Candidates on Monster - St. Louis, Apr-May 2008

Job Posting Education Requirement	Senior Executive	Executive	Management	Mid Career	Entry Level	Student (under/graduate)	Student (HS)
All IT Job Postings	0%	1%	11%	81%	7%	0%	0%
Comp SW Eng, App	0%	1%	15%	80%	3%	1%	0%
Comp Sys Analysts	0%	1%	7%	84%	8%	1%	0%
Computer Programmers	0%	0%	8%	84%	8%	0%	0%
Network & Comp Systems Admins	0%	0%	9%	83%	7%	1%	0%
Comp SW Eng, Systems SW	1%	0%	14%	81%	4%	0%	0%
Database Administrators	0%	0%	1%	97%	2%	0%	0%
Computer Support Specialists	0%	0%	4%	55%	39%	2%	0%
Computer and IS Managers	0%	3%	38%	59%	0%	0%	0%
Computer Hardware Engineers	0%	0%	7%	87%	7%	0%	0%
Network Sys & Data Comm Analysts	0%	2%	18%	79%	2%	0%	0%
Telecom Equip Inst & Rep, Ex Line Inst	0%	0%	5%	75%	20%	0%	0%
Computer Software Engineers	0%	0%	5%	92%	3%	0%	0%
Operations Research Analysts	0%	0%	5%	77%	18%	0%	0%
Data Entry Keyers	0%	0%	5%	70%	25%	0%	0%

*Occupations with less than 15 available job postings within the St. Louis market were excluded

Figure 14: Summary of Career Level Requirements by IT Occupation

St. Louis IT Experience Requirements

80% of the IT opportunities in St. Louis are seeking candidates with 2 to 7 years of experience. Only 2% seek individuals with less than 1 year of experience. 69% of IT job postings in St. Louis did not specify years of experience needed and were not included in the experience level analysis.

Computer support specialists, telecommunications equipment installers and repairers, and operations research analysts require less experience than other IT occupations and represent a good area for job seekers to enter the marketplace.

Computer and information systems management opportunities require more experience than other IT occupations and represent career paths for job seekers.

The table below summarizes experience required by IT occupation:

Years of Experience Desired of IT Candidates on Monster - St. Louis, Apr-May 2008

Job Posting Education Requirement	Less than 1 Year	1+ to 2 Years	2+ to 5 Years	5+ to 7 Years	7+ to 10 Years	10+ to 15 Years	More than 15 Years
All IT Job Postings	2%	11%	49%	31%	4%	2%	0%
Comp SW Eng, App	1%	7%	45%	38%	4%	5%	0%
Comp Sys Analysts	2%	11%	58%	18%	7%	2%	1%
Computer Programmers	4%	4%	53%	36%	3%	1%	0%
Network & Comp Systems Admins	0%	14%	52%	29%	5%	0%	0%
Comp SW Eng, Systems SW	2%	7%	43%	45%	2%	0%	0%
Database Administrators	0%	9%	55%	36%	0%	0%	0%
Computer Support Specialists	17%	50%	13%	21%	0%	0%	0%
Computer and IS Managers	0%	8%	60%	16%	8%	8%	0%
Computer Hardware Engineers	0%	0%	67%	33%	0%	0%	0%
Network Sys & Data Comm Analysts	0%	4%	39%	39%	13%	4%	0%
Telecom Equip Inst & Rep, Ex Line Inst	13%	13%	47%	20%	7%	0%	0%
Computer Software Engineers	0%	0%	60%	30%	10%	0%	0%
Operations Research Analysts	13%	13%	63%	13%	0%	0%	0%
Data Entry Keyers	0%	0%	67%	33%	0%	0%	0%

*Occupations with less than 15 available job postings within the St. Louis market were excluded

Figure 15: Summary of Experience Requirements by IT Occupation

St. Louis IT Job Duration Requirements

61% of the IT jobs posted in the St. Louis area were for Permanent positions. 39% of the postings were for Contract/Temporary Workers, and less than 1% was for Interns and/or Seasonal workers. The absence of Internship postings on Monster.com should not be extrapolated to suggest that St. Louis employers are not seeking Interns. Many colleges and universities employ their own Internship solutions and it is not uncommon to see a low number of postings in this category. 50% of IT job postings in St. Louis did not specify job type needed and were not included in the job type analysis.

Of particular note, on the other hand, is the balance of permanent vs. contract employees in the region. More contract/temporary workers are being sought for computer software engineers, computer programmers and database administrators than permanent workers.

The positions with the greatest demand for permanent IT workers were found in:

1. Computer Support Specialists (82%)
2. Computer & IS Managers (74%)
3. Network System & Data Communications Analysts (73%)
4. Telecommunications Equipment Installers & Repair (Except Line Installers) (72%)
5. Computer Software Engineers, Systems Software (67%)

The table below summarizes job type requirements by IT occupation:

Job Type of IT Candidates in Demand on Monster - St. Louis, Apr-May 2008

Job Posting Occupation	Permanent	Contract / Temporary	Intern / Seasonal
All IT Job Postings	61%	39%	0%
Comp SW Eng, App	63%	37%	0%
Comp Sys Analysts	59%	41%	0%
Computer Programmers	48%	52%	0%
Network & Comp Systems Admins	65%	33%	2%
Comp SW Eng, Systems SW	67%	33%	0%
Database Administrators	50%	50%	0%
Computer Support Specialists	82%	18%	0%
Computer and IS Managers	74%	26%	0%
Computer Hardware Engineers	60%	40%	0%
Network Sys & Data Comm Analysts	73%	27%	0%
Telecom Equip Inst & Rep, Ex Line Inst	72%	28%	0%
Computer Software Engineers	47%	53%	0%
Operations Research Analysts	59%	36%	5%
Data Entry Keyers	54%	46%	0%

*Occupations with less than 15 available job postings within the St. Louis market were excluded

Figure 16: Summary of Job Type Requirements by IT Occupation

St. Louis IT Job Status Requirements

Almost all of the IT jobs posted in the St. Louis region were for Full-Time positions. In the analysis of all the occupational classes, 98% or more of all occupations analyzed were for full time positions. 54% of IT job postings in St. Louis did not specify job status needed and were not included in the job status analysis.

This illustrates a key strategic opportunity for St. Louis to expand their IT workforce by creating greater opportunities for part-time or job sharing arrangements, especially to attract strategic groups such as older workers, workforce re-entrants, and career crossover candidates.

The table below summarizes job status requirements by IT occupation:

Job Status of IT Candidates in Demand on Monster - St. Louis, Apr-May 2008

Job Posting Occupation	Full-time	Part-time	Per-diem
All IT Job Postings	99%	1%	0%
Comp SW Eng, App	98%	2%	0%
Comp Sys Analysts	97%	3%	0%
Computer Programmers	100%	0%	0%
Network & Comp Systems Admins	99%	0%	1%
Comp SW Eng, Systems SW	100%	0%	0%
Database Administrators	100%	0%	0%
Computer Support Specialists	100%	0%	0%
Computer and IS Managers	98%	2%	0%
Computer Hardware Engineers	98%	2%	0%
Network Sys & Data Comm Analysts	100%	0%	0%
Telecom Equip Inst & Rep, Ex Line Inst	100%	0%	0%
Computer Software Engineers	100%	0%	0%
Operations Research Analysts	95%	5%	0%
Data Entry Keyers	96%	4%	0%

*Occupations with less than 15 available job postings within the St. Louis market were excluded

Figure 17: Summary of Job Status Requirements by IT Occupation

St. Louis IT Demand by Company

Below are the top 30 companies seeking IT candidates in St. Louis in order based on number of job postings:

1. TEKsystems
2. Kforce Professional Staffing
3. NetEffects, Inc.
4. Deloitte
5. Ajilon Consulting
6. COMSYS
7. MRINetwork
8. Spherion
9. Yoh IT
10. CyberCoders
11. Clearwire
12. Edward Jones
13. Belcan Services Group Ltd. Partnership
14. Scottrade, Inc.
15. MATRIX Resources
16. Manpower Professional
17. Brown Shoe
18. Modis, Inc.
19. Apex
20. Aerotek
21. Covidien
22. CDI Corporation
23. The Judge Group
24. Computer Sciences Corporation CSC
25. Enterprise Rent-A-Car
26. Kelly IT Resources
27. Citi
28. MasterCard Worldwide
29. Jacobson Staffing Inc
30. Volt Services

What Business Needs

St. Louis Key IT Key Words

While examining the key words in the job bodies posted by St. Louis area employers, we have highlighted some key words and the percentage (%) of jobs in which they appear to assist in the deeper analysis of what employers want.

Rank	Key Words	%	Change from Previous Month
1	Technical	61%	1%
2	Information	58%	2%
3	Application	58%	24%
4	Business	55%	3%
5	Services	55%	3%
6	Knowledge	53%	-2%
7	Management	53%	-1%
8	Systems	52%	-3%
9	Technology	47%	-1%
10	Software	46%	7%
11	Data	45%	12%
12	Clients	42%	21%
13	Solutions	41%	6%
14	Customer	39%	10%
15	Applications	38%	5%
16	Expert	32%	20%
17	Success	30%	20%
18	Enterprise	21%	3%
19	People	21%	4%
20	Products	21%	4%
21	Complex	21%	5%
22	Specifications	19%	3%
23	Financial	19%	4%
24	Standards	17%	-1%
25	Great	16%	5%
26	Practices	15%	5%
27	Configuration	14%	-2%
28	Results	14%	4%
29	Hardware	13%	-3%
30	Goals	13%	0%
31	Superior	11%	0%
32	Constant	11%	1%
33	Worldwide	11%	3%
34	Compliance	10%	-2%
35	Consultant	10%	3%

St. Louis Top Hard Skills in Demand

We analyzed the job text to extract out key skills in demand. Development, design, software and project were the top hard skills in demand.

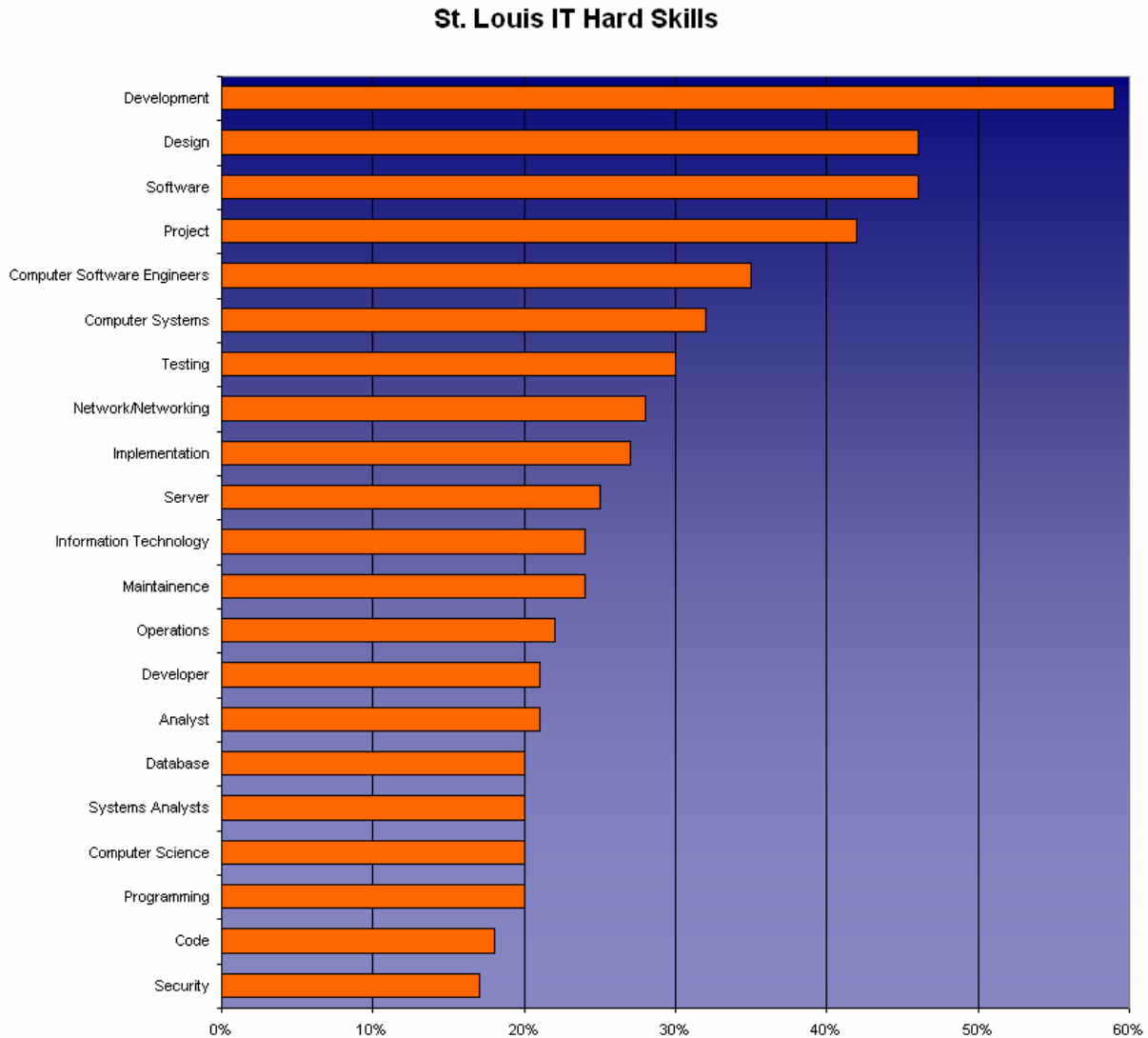


Figure 18: St. Louis Region IT Hard Skills in Demand Reveal That Development, Design and Server Skills Are in Highest Demand

What Business Needs

Key changes for IT Hard Skills in Demand include increases for Development, Design, Coding, Maintenance and Programming, with decreased mention of Administration, Security, Database, and Server.

St. Louis IT Hard Skills Changes for Quarter

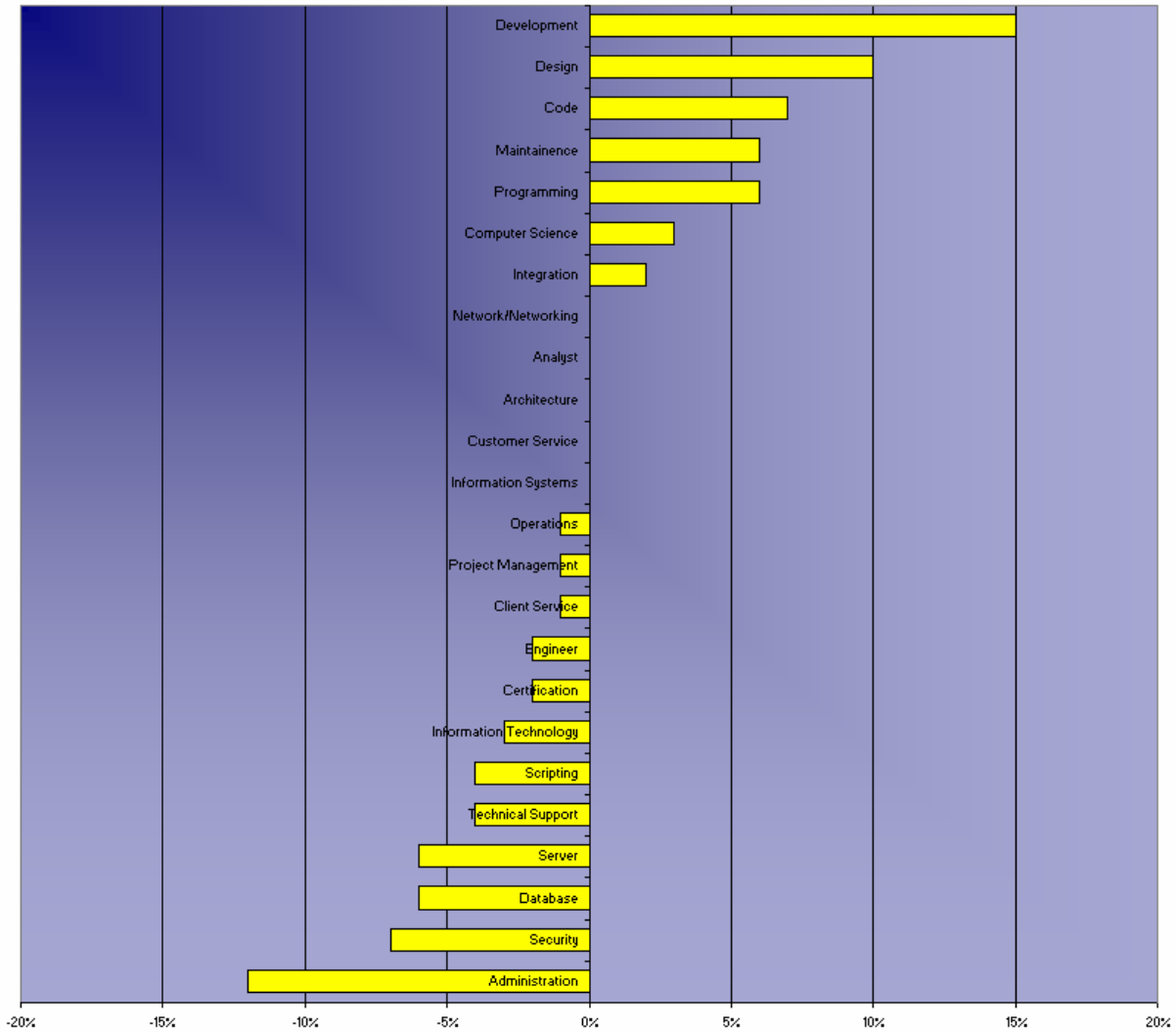


Figure 19: St. Louis Region IT Hard Skills in Demand Changes for the Quarter Reveal Key Increases and Decreases in Demand.

What Business Needs

St. Louis Regional Information Technology Labor Market Research

Apr-May 2008

Below are the top hard skills required by employers for IT jobs in the St. Louis area.

Rank	Hard Skills	%	Previous Quarter	Change for Quarter
1	Development	59%	44%	15%
2	Software	46%		New
3	Design	46%	36%	10%
4	Project	42%		New
5	Computer Software Engineers	35%		New
6	Computer Systems	32%		New
7	Testing	30%		New
8	Network/Networking	28%	28%	0%
9	Implementation	27%		New
19	Server	25%	31%	-6%
11	Maintenance	24%	18%	6%
12	Information Technology	24%	27%	-3%
13	Operations	22%	23%	-1%
14	Analyst	21%	21%	0%
15	Developer	21%		New
16	Programming	20%	14%	6%
17	Computer Science	20%	17%	3%
18	Systems Analysts	20%		New
19	Database	20%	26%	-6%
20	Code	18%	11%	7%
21	Security	17%	24%	-7%
22	Computer Programmers	16%		New
23	Software Development	15%		New
24	Architecture	15%	15%	0%
25	Integration	14%	12%	2%
26	Customer Service	14%	14%	0%
27	Administration	13%		New
28	Information Systems	13%	13%	0%
29	Administration	13%	25%	-12%
30	Application Development	12%		New
31	Project Management	12%	13%	-1%
32	Engineer	12%	14%	-2%
33	Certification	10%	12%	-2%
34	Client Service	9%	10%	-1%
35	Scripting	8%	12%	-4%
36	Technical Support	7%	11%	-4%

St. Louis Key IT Technologies in Demand

We analyzed the job text to extract out key technologies in demand. SQL, Microsoft, Oracle, and JAVA are the top technologies in demand across all job postings.

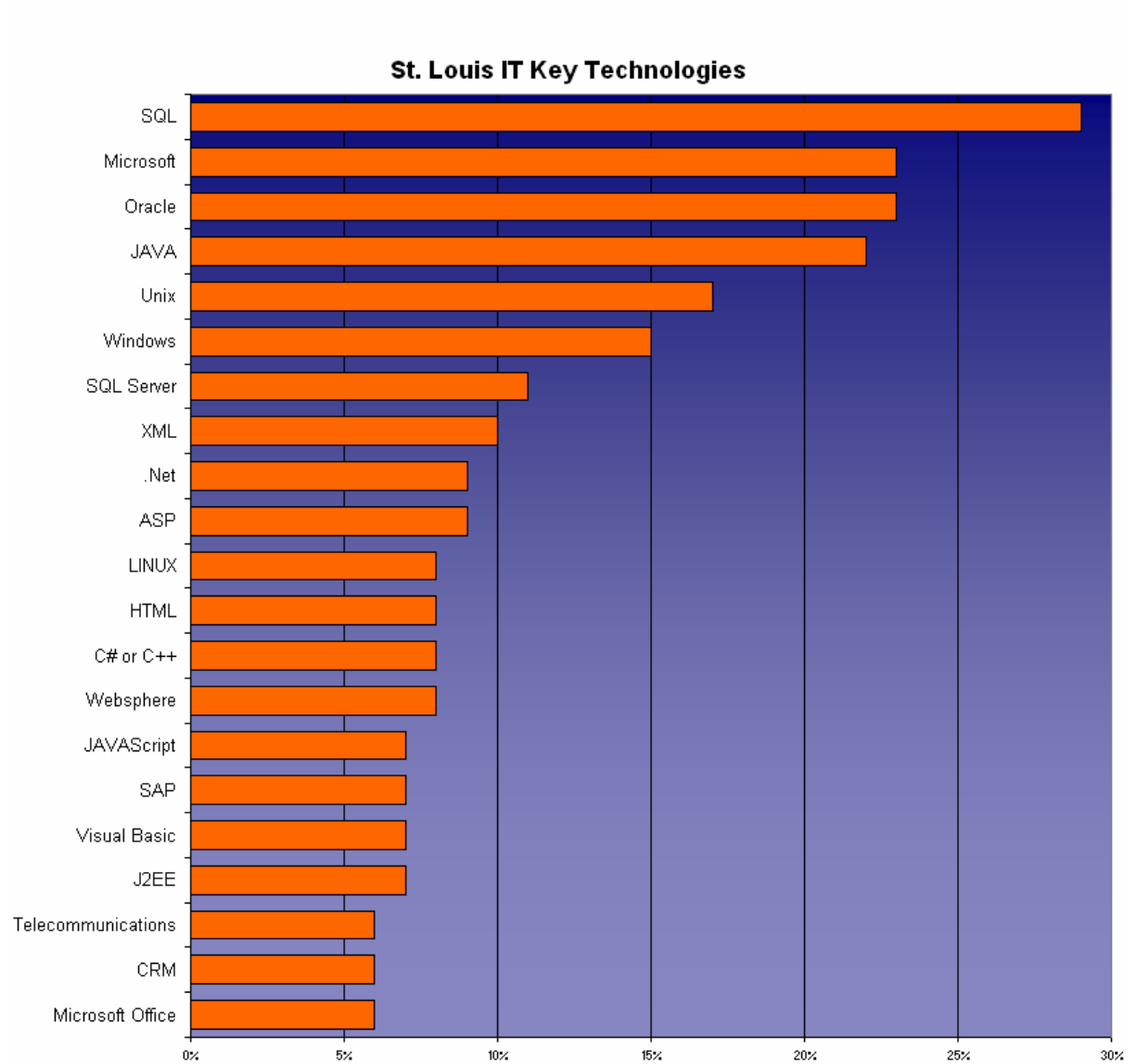


Figure 20: St. Louis Regional Technologies in Highest Demand Include SQL, Microsoft, Oracle, JAVA and UNIX Skills.

What Business Needs

Below are the top technologies required by employers for IT jobs in the St. Louis area.

Rank	Skill	%	Previous Quarter	Change
1	SQL	29%	28%	1%
2	Oracle	23%	21%	2%
3	Microsoft	23%	24%	-1%
4	JAVA	22%	13%	9%
5	Unix	17%	19%	-2%
6	Windows	15%	23%	-8%
7	SQL Server	11%	12%	-1%
8	XML	10%	8%	2%
9	ASP	9%	7%	2%
10	.Net	9%	11%	-2%
11	Websphere	8%		New
12	C# or C++	8%	6%	2%
13	HTML	8%	7%	1%
14	LINUX	8%	9%	-1%
15	J2EE	7%		New
16	Visual Basic	7%		New
17	SAP	7%		New
18	JavaScript	7%		New
19	TCP/IP	6%	9%	-3%
20	Microsoft Office	6%		New
21	CRM	6%		New
22	Telecommunications	6%		New
23	XP	5%		New
24	Perl	5%	6%	-1%
25	CISCO	5%	9%	-4%
26	Routers	4%	6%	-2%
27	LAN	4%	7%	-3%
28	PeopleSoft	4%		New
29	Cobol	4%		New
30	UML	4%		New
31	Mainframe	4%		New
32	CSS	4%		New
33	Data Warehouse	4%		New
34	PHP	4%		New
35	Crystal Reports	4%		New
36	MySQL	4%		New
37	Visio	4%		New
38	Spring	4%		New
39	Hibernate	4%		New
40	Struts	4%		New
41	Agile	4%		New
42	Active Directory	3%	7%	-4%
43	JDBC	3%		New
44	ADO	3%		New

St. Louis Key IT Soft Skills and Activities

The table below summarizes key soft skills and core activities to be performed by job seekers across the IT sector. This information may be useful in developing holistic curriculum for flexible talents in a rapidly evolving IT landscape.

Service, Leading, and Supporting are the top 3 soft skills/activities mentioned in St. Louis IT jobs.

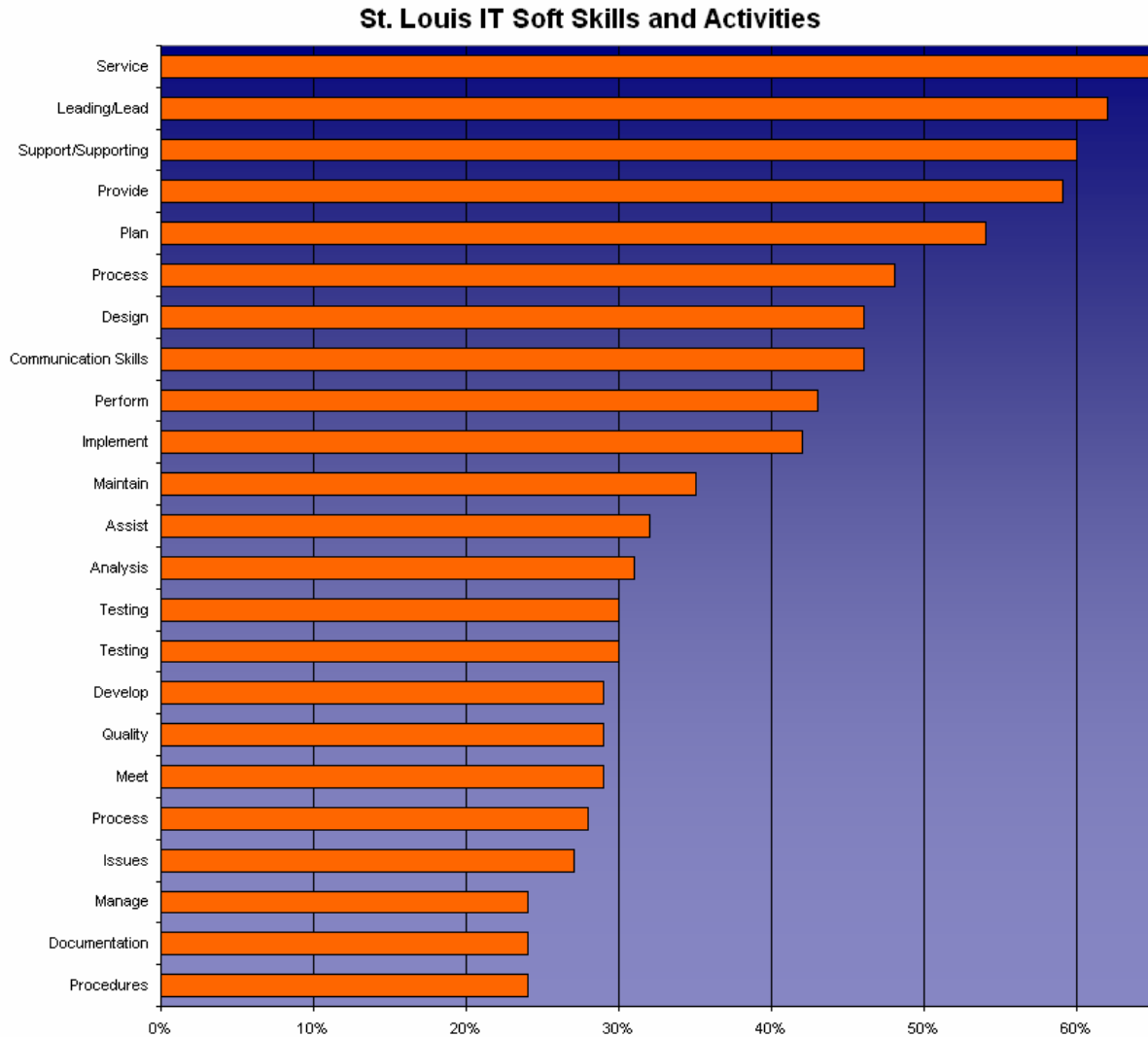


Figure 21: St. Louis Regional IT Soft Skills and Activities in Demand Include Service, Leading/Lead, Support/Supporting, Providing, and Planning.

St. Louis IT Soft Skills and Activities Changes for Quarter

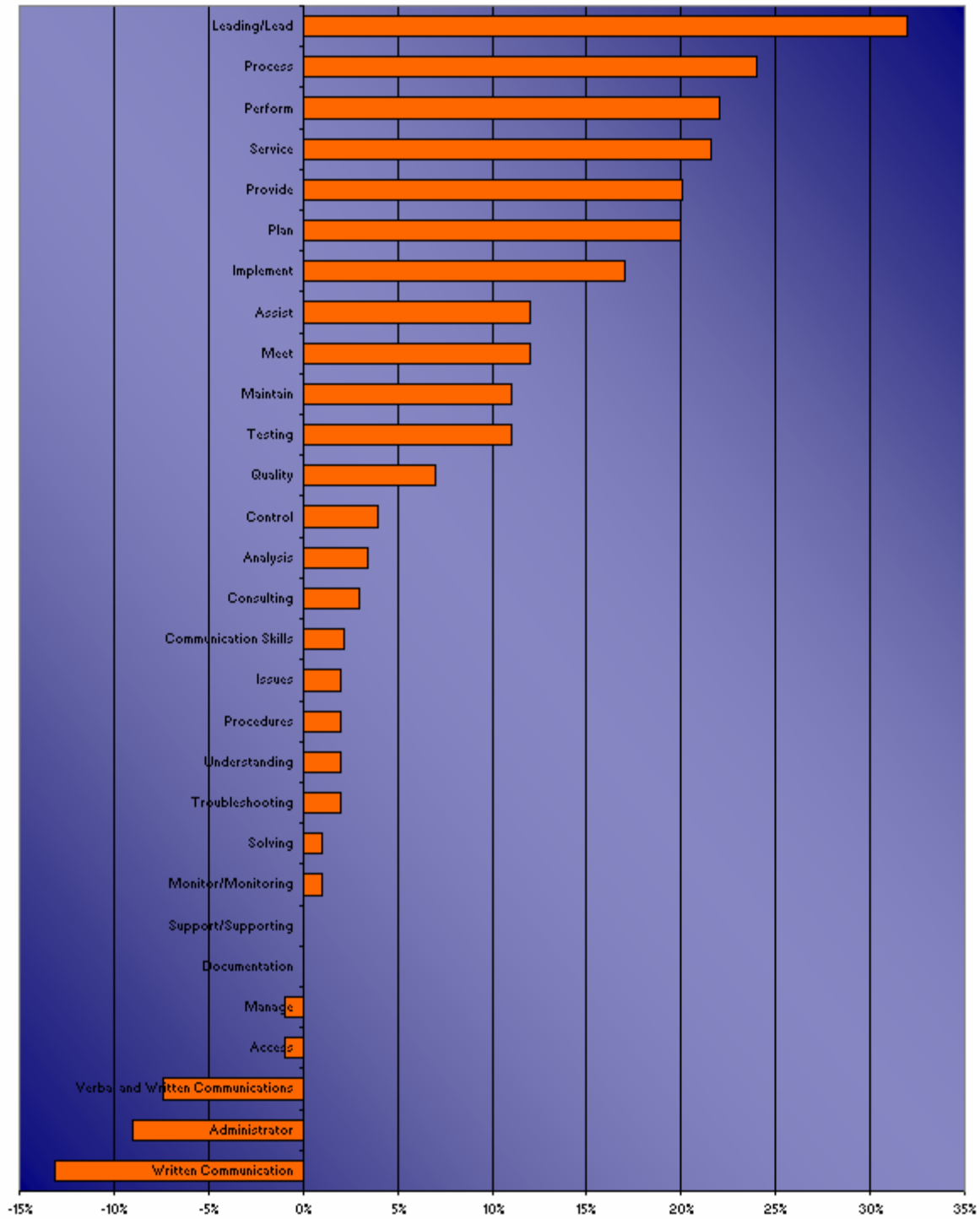


Figure 22. St. Louis IT Soft Skills Changes for the Quarter Reveal an Increase in Lead/Leading, Process, Perform, and Service, and a Decline in Written Communication, Administrator, and Verbal and Written Communications.

What Business Needs

The table below summarizes the key soft skills and activities required of IT candidates, as well as the change in demand from Jan-Mar 2008 (Q1) to Apr-May 2008. Strong growth was seen in Lead/Leading, Process, Perform, and Service. Key declines were seen in Written Communication, Administrator, and Verbal and Written Communications.

Rank	Soft Skills	%	Previous Quarter	Change	Rank	Soft Skills	%	Previous Quarter	Change
1	Service	65%	43%	22%	25	Control	19%	15%	4%
2	Leading/Lead	62%	30%	32%	26	Consulting	19%	16%	3%
3	Support/Supporting	60%	60%	0%	27	Create	19%		New
4	Provide	59%	39%	20%	28	Access	18%	19%	-1%
5	Plan	54%	34%	20%	29	Troubleshooting	17%	15%	2%
6	Process	48%	24%	24%	30	Solving	17%	16%	1%
7	Communication Skills	46%	44%	2%	31	Analyze	17%		New
8	Design	46%		New	32	Monitor/Monitoring	16%	15%	1%
9	Perform	43%	21%	22%	33	Written Communication	16%	29%	-13%
10	Implement	42%	25%	17%	34	Interpersonal	15%		New
11	Maintain	35%	24%	11%	35	Learn	12%		New
12	Assist	32%	20%	12%	36	Improve	11%		New
13	Analysis	31%	28%	3%	37	Verbal and Written Communications	10%	17%	-7%
14	Testing	30%	19%	11%	38	Coordinate	10%		New
15	Testing	30%		New	39	Administrator	9%	18%	-9%
16	Meet	29%	17%	12%	40	Helping	9%		New
17	Quality	29%	22%	7%	41	Deploying	9%		New
18	Develop	29%		New	42	Build	9%		New
19	Process	28%		New	43	Resolve	9%		New
20	Issues	27%	25%	2%	44	Satisfy	9%		New
21	Procedures	24%	22%	2%	45	Research	9%		New
22	Documentation	24%	24%	0%	46	Passionate	8%		New
23	Manage	24%	25%	-1%	47	Define	8%		New
24	Understanding	23%	21%	2%					

St. Louis Key IT Job Postings by Employer Size

The number of postings by Staffing agencies decreased by 8% between Jan-Mar 2008 and the current research for May-Jun 2008. Large business postings dropped by 10% from the previous quarter. Medium-sized company postings gained 14% of the job postings. With the exception of staffing agencies, job postings were highest for medium-sized businesses (32%), followed by small businesses (17%), then large businesses (6%).

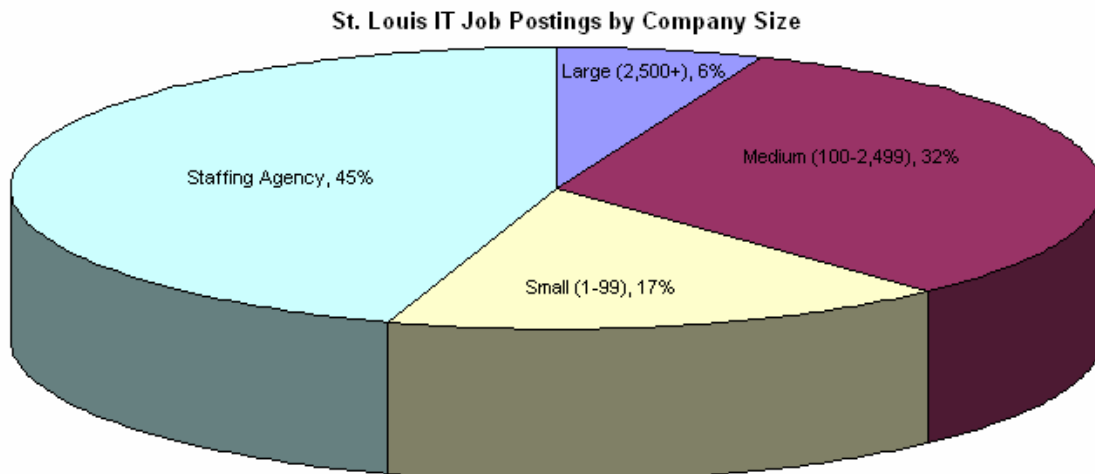


Figure 23: Staffing Agencies Represented Nearly Half of All Job Postings

Company Size (# of Employees)	% of Jobs
Large (2,500+)	6%
Medium (100-2,499)	32%
Small (1-99)	17%
Staffing Agencies	45%

St. Louis IT Job Postings by Employer Type

The majority of the job postings came from business (52%) followed by Staffing (45%), Non-Profit (3%) and Government (1%).

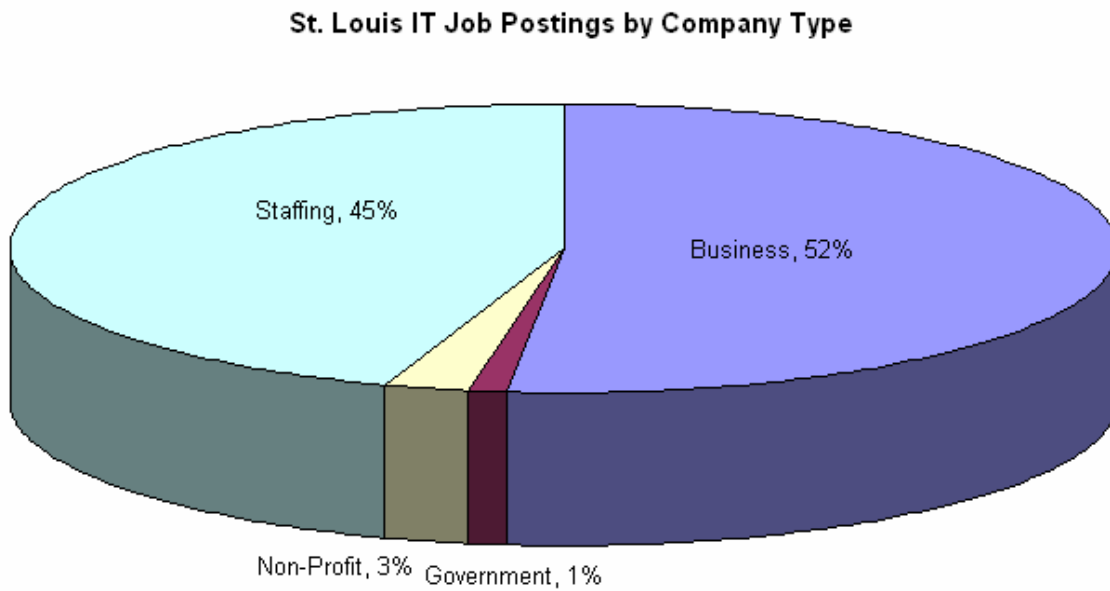


Figure 24: Business Represented 52% of All Job Postings

Company Type	% of Jobs
Business	52%
Staffing Agencies	45%
Non-Profit	3%
Government	1%

St. Louis Regional IT Salary Analysis

Employers are not required to post salary information when posting jobs to Monster.com. For IT jobs in the St. Louis region, only 13% of the jobs included salary information. We analyzed the salary information from those that indicated salaries and provide the results in the table below.

The # of Jobs with Salary column indicates the number of jobs posted for the Apr-May 2008 period that included salary information. For ease of comparison, hourly rates were converted to annual salaries. Average Minimum Salary is the average of the minimum salaries listed for the position. Range is the distribution of minimum salaries indicated by employers for the job category. Change in Average Minimum since Jan-Mar 2008 reflects the change in the Average Minimum Salary for the Apr-May 2008 period from the Jan-Mar 2008 period. Many Job Categories do not have a value in the Change in Average Minimum Salary column because there were too few postings in the previous period for statistical analysis.

The Top 5 highest paying IT occupations in the St. Louis region are:

1. Software/System Architecture	\$120,923
2. IT Project Management	\$92,732
3. Network and Server Administration	\$86,590
4. Enterprise Software Implementation & Consulting	\$83,810
5. Systems Analysis – IT	\$81,363

The Bottom 5 Highest paying IT occupations in the St. Louis region are:

1. Call Center	\$21,202
2. Data Entry/Order Processing	\$22,454
3. Customer Support/Client Care	\$23,340
4. Production/Operations	\$33,500
5. Desktop Service & Support	\$33,804

There were 6 IT job categories with minimum salary increases in the Apr-May 2008 period compared to the Jan-Mar 2008 period in the St. Louis region:

1. Software/System Architecture	+\$40,090
2. Network and Server Administration	+\$22,911
3. Database Development/Administration	+\$14,103
4. Software/Web Development	+\$6,846
5. IT/Software Development	+\$2,836
6. Systems Analysis – IT	+\$1,679

There were 2 IT job categories with minimum salary decreases in the Apr-May 2008 period compared to the Jan-Mar 2008 period in the St. Louis region:

1. Production/Operations	-\$10,500
2. Desktop Service & Support	-\$2,029

What Business Needs

Job Category	Apr-May 2008			Change in Average Minimum Salary since Jan-Mar 2008
	# Jobs with Salary	Average Minimum Salary	Range	
IT/Software Development	65	\$ 75,542	27-150K	\$ 2,836
Systems Analysis - IT	51	\$ 81,363	27.2-220K	\$ 1,679
Software/Web Development	45	\$ 73,784	27.2-150K	\$ 6,846
Database Development/Administration	44	\$ 80,795	40-180K	\$ 14,103
IT Project Management	41	\$ 92,732	27-220K	
Network and Server Administration	33	\$ 86,590	20-180K	\$ 22,911
Software/System Architecture	26	\$ 120,923	56-220K	\$ 40,090
Customer Support/Client Care	24	\$ 23,340	16-36.9K	
Call Center	22	\$ 21,202	16-24K	
Enterprise Software Implementation & Consulting	21	\$ 83,810	40-130K	
Desktop Service & Support	18	\$ 33,804	20-60K	\$ (2,029)
Technical Presales Support & Technical Sales	18	\$ 52,500	30-85K	
Data Entry/Order Processing	14	\$ 22,454	19.4-30K	
Usability/Information Architecture	13	\$ 70,769	50-95K	
Equipment Install/Maintain/Repair	11	\$ 38,378	25-60K	
Production/Operations	11	\$ 33,500	20-65K	\$ (10,500)
Installation/Maintenance/Repair	10	\$ 34,748	27-50K	
Web/UI/UX Design	10	\$ 50,500	35-70K	

Figure 25. Salary Information for IT Jobs in the St. Louis Region and Changes Since the Jan-Mar 2008 period reveals more increases in salaries than decreases.

Essential Guidance

This research summarizes the state of St. Louis research for April-May 2008. IT hiring in the St. Louis region is slowing from the previous quarter. More employers are posting directly indicated by a decrease in staffing agency postings. Staffing agencies remain a critical link in the hiring pipeline and efforts should be made to ensure those staffing agencies with strategic capabilities are engaged in economic development strategy.

A shift has taken place since the last quarterly report and employers are demanding more "hard" IT talent than in the past. The customer support and service roles continue to decline, while the demand for engineering, development, and networking talent increases.

Actions to Consider

- **Reduce the barriers to entering IT occupations.** There were only 3 occupations available to entry-level IT professionals – Telecommunications installation, Data Key Enterers, and Customer Support Specialists. The region should consider creating internships and cooperative education pathways to get talent into IT occupations.
- **Consider Increasing the Short-Term Talent Supply Chain for Computer Systems Analysts, Software Engineering, and Network and Computer Systems Administrators.** These careers are showing the greatest year-over-year increased demand by employers.
- **Shift from Support-Oriented to "Hard" IT Skills.** Develop Migration Patterns for Computer Support Specialists. With a 39% year-over-year drop in demand, Computer Support Specialists are in decreased demand. Consider directing talent development from computer support into more "hard" IT areas such as engineering, administrators, or JAVA and ASP programming.
- **Certification Programs in SQL, Network Administration, JAVA, UNIX, and Oracle Development will help businesses.** Skills in these areas are best addressed with certification training and do not necessarily require full degree credentials. The region should consider rapid-deployment initiatives to respond to these increased needs.
- **Continue to Track Salary Trends especially in "Hard" IT areas.** The period witnessed a sharp rise in salary for Software/System Architecture talent, Network and Server Administration, and Database Development/Administration. Future salary summaries will provide greater insight into trends reflective of possible talent deficits that may be used to develop talent attraction strategies for key talent deficit areas.
- **Develop workforce development programs to assist workers who are Support Specialists, Information Systems Managers, and Network & Computer System Analysts** to develop skills to be able to perform more technical roles in demand, such as database administrators, systems analysts, programmers, or software application engineers.

Appendix A: Standard Occupation Classifications Mapping to Monster Occupational Classifications

In order to analyze the St. Louis IT job posting data, Monster mapped existing Monster Occupational classifications (MOCs) to the generally-accepted Standard Occupational Classifications (SOCs). The crosswalk table below shows how these mappings were made.

Standard Occupation:	Monster Occupation:
Computer and Information Scientists, Research	Firmware Engineer
Computer and Information Systems Managers	Computer, IT, and Mathematical Management, Other
Computer and Information Systems Managers	Director - Wireless Operations
Computer and Information Systems Managers	Director-Bioinformatics
Computer and Information Systems Managers	E-Commerce Director
Computer and Information Systems Managers	E-Commerce Operations Manager
Computer and Information Systems Managers	Information Architecture Manager
Computer and Information Systems Managers	Information Systems Manager
Computer and Information Systems Managers	Information Systems Manager - Manufacturing
Computer and Information Systems Managers	Information Systems Vice-President
Computer and Information Systems Managers	Information Technology Manager
Computer and Information Systems Managers	Information Technology Project Manager
Computer and Information Systems Managers	IT Operations Manager
Computer and Information Systems Managers	Research and Development Director - Software
Computer and Information Systems Managers	Software Quality Assurance Director
Computer and Information Systems Managers	Systems and Programming Manager
Computer and Information Systems Managers	Technical Services Vice-President
Computer and Information Systems Managers	UNIX Systems Manager
Computer Hardware Engineers	Digital Board Design Engineer
Computer Hardware Engineers	Fiber Optic Application Engineer
Computer Hardware Engineers	Hardware Engineer
Computer Hardware Engineers	Hardware Test Engineer
Computer Hardware Engineers	Optical Engineer
Computer Hardware Engineers	Quality Assurance Networking Test Engineer
Computer Hardware Engineers	RF Design Engineer
Computer Hardware Engineers	Sr. ASIC Design Engineer
Computer Hardware Engineers	Sr. Hardware Engineer
Computer Hardware Engineers	Systems Integration Engineer
Computer Hardware Engineers	Telecommunications Network Engineer
Computer Hardware Engineers	Video Engineer
Computer Operators	Computer Operations Group Leader
Computer Operators	Computer Operator
Computer Operators	Sr. Computer Operator
Computer Programmers	AS/400 Programmer Analyst
Computer Programmers	ASP Developer
Computer Programmers	C/C++ Programmer
Computer Programmers	HTML Developer
Computer Programmers	Java Developer
Computer Programmers	Java Developer - Entry Level
Computer Programmers	Lead ASP Developer
Computer Programmers	Lisp Programmer
Computer Programmers	MS Access/Visual Basic Database Developer
Computer Programmers	Programmer
Computer Programmers	Programmer - Entry Level
Computer Programmers	Sr. ASP Developer
Computer Programmers	Sr. Programmer
Computer Programmers	Sr. Visual Basic Programmer
Computer Programmers	Visual Basic/ASP Programmer
Computer Programmers	Web Producer

Continued...

What Business Needs

Standard Occupation:	Monster Occupation:
Computer Software Engineers	Lead Software Quality Assurance Engineer
Computer Software Engineers	Software Change Control Specialist
Computer Software Engineers	Software Development, Other
Computer Software Engineers	Software Quality Assurance Engineer
Computer Software Engineers, Applications	Account Support Analyst
Computer Software Engineers, Applications	Applications Engineer
Computer Software Engineers, Applications	Baan Integration Engineer
Computer Software Engineers, Applications	Business Intelligence Implementation Consultant
Computer Software Engineers, Applications	Client/Server Programmer
Computer Software Engineers, Applications	Computer Support Specialist - Educational Curriculum
Computer Software Engineers, Applications	Consulting Project Manager - Software
Computer Software Engineers, Applications	Data Conversion Consultant
Computer Software Engineers, Applications	Data Conversion Project Manager
Computer Software Engineers, Applications	Data Delivery Engineer
Computer Software Engineers, Applications	Data Integration Developer
Computer Software Engineers, Applications	Data Modeler
Computer Software Engineers, Applications	Data Warehouse Developer
Computer Software Engineers, Applications	Data Warehouse Information Architect
Computer Software Engineers, Applications	E-Commerce Functional Analyst
Computer Software Engineers, Applications	E-Commerce Integration Consultant
Computer Software Engineers, Applications	E-Commerce Intelligence Consultant
Computer Software Engineers, Applications	Java Architect
Computer Software Engineers, Applications	Lead Applications Engineer
Computer Software Engineers, Applications	Lead Data Conversion Consultant
Computer Software Engineers, Applications	Lead Data Modeler
Computer Software Engineers, Applications	Lead Data Warehouse Developer
Computer Software Engineers, Applications	Lead J.D. Edwards Integration Engineer
Computer Software Engineers, Applications	Lead Oracle Integration Engineer
Computer Software Engineers, Applications	Lead SAP Integration Engineer
Computer Software Engineers, Applications	Lead Technical Integration Consultant
Computer Software Engineers, Applications	Oracle Applications Programmer
Computer Software Engineers, Applications	Oracle Integration Engineer
Computer Software Engineers, Applications	PeopleSoft Financials Engineer
Computer Software Engineers, Applications	PeopleSoft HRMS Engineer
Computer Software Engineers, Applications	Programmer Analyst
Computer Software Engineers, Applications	SAP Integration Engineer
Computer Software Engineers, Applications	Server Software Engineer
Computer Software Engineers, Applications	Software Engineer
Computer Software Engineers, Applications	Software Project Manager
Computer Software Engineers, Applications	Software Quality Assurance Engineer - Web Production
Computer Software Engineers, Applications	Sr. Applications Engineer
Computer Software Engineers, Applications	Sr. Business Intelligence Implementation Consultant
Computer Software Engineers, Applications	Sr. Data Modeler
Computer Software Engineers, Applications	Sr. Data Warehouse Developer
Computer Software Engineers, Applications	Sr. Data Warehouse Information Architect
Computer Software Engineers, Applications	Sr. ERP Integration Engineer
Computer Software Engineers, Applications	Sr. Oracle Integration Engineer
Computer Software Engineers, Applications	Sr. Oracle Applications Programmer
Computer Software Engineers, Applications	Sr. Programmer Analyst
Computer Software Engineers, Applications	Sr. SAP Integration Engineer
Computer Software Engineers, Applications	Sr. Siebel Integration Engineer
Computer Software Engineers, Applications	Sr. Software Engineer
Computer Software Engineers, Applications	Sr. Technical Integration Consultant
Computer Software Engineers, Applications	Sr. Web Applications Developer
Computer Software Engineers, Applications	Sr. Web Site Designer
Computer Software Engineers, Applications	Technical Consulting Manager
Computer Software Engineers, Applications	Web Applications Developer
Computer Software Engineers, Applications	Web Applications Developer - Entry Level
Computer Software Engineers, Applications	Web Applications Quality Assurance Engineer
Computer Software Engineers, Applications	Web Site Designer
Computer Software Engineers, Applications	Web User Interface Designer

Continued...

What Business Needs

Standard Occupation:	Monster Occupation:
Computer Software Engineers, Systems Software	E-Commerce Architect
Computer Software Engineers, Systems Software	E-Commerce Functional Architect
Computer Software Engineers, Systems Software	E-Commerce Project Manager
Computer Software Engineers, Systems Software	Embedded Software Diagnostics Engineer
Computer Software Engineers, Systems Software	ERP Architect
Computer Software Engineers, Systems Software	Infrastructure Architect
Computer Software Engineers, Systems Software	Java Server Engineer
Computer Software Engineers, Systems Software	Lead PeopleSoft Architect
Computer Software Engineers, Systems Software	Lead SAP Architect
Computer Software Engineers, Systems Software	Mainframe Specialist
Computer Software Engineers, Systems Software	Oracle Architect
Computer Software Engineers, Systems Software	PeopleSoft Architect
Computer Software Engineers, Systems Software	SAP Architect
Computer Software Engineers, Systems Software	Security Architect
Computer Software Engineers, Systems Software	Siebel Architect
Computer Software Engineers, Systems Software	Software Engineer - Device Drivers
Computer Software Engineers, Systems Software	Sr. SAP Architect
Computer Software Engineers, Systems Software	Sr. ERP Architect
Computer Software Engineers, Systems Software	Sr. J. D. Edwards Architect
Computer Software Engineers, Systems Software	Sr. Oracle Architect
Computer Software Engineers, Systems Software	Sr. Product Integration Consultant
Computer Software Engineers, Systems Software	Systems Architect
Computer Software Engineers, Systems Software	Systems Programmer
Computer Software Engineers, Systems Software	Web Project Manager
Computer Software Engineers, Systems Software	Web Reporting Developer
Computer Software Engineers, Systems Software	Web Architect
Computer Specialists, All Other	Webmaster
Computer Specialists, All Other	Help Desk Analyst
Computer Support Specialists	Help Desk Manager
Computer Support Specialists	Help Desk Representative
Computer Support Specialists	IT Help Desk Clerk
Computer Support Specialists	PC Specialist
Computer Support Specialists	Sr. Desktop Technical Analyst
Computer Support Specialists	System Security Technician - External
Computer Support Specialists	Technical Support Consultant
Computer Support Specialists	Technical Support Representative - Entry Level
Computer Support Specialists	Technical Support Specialist
Computer Systems Analysts	Accounting Systems Coordinator
Computer Systems Analysts	AIX Systems Administrator
Computer Systems Analysts	Applications Design Analyst
Computer Systems Analysts	Applications Development Manager
Computer Systems Analysts	Billing Systems Analyst
Computer Systems Analysts	Business Systems Analyst
Computer Systems Analysts	Business Systems Design Analyst
Computer Systems Analysts	Business Systems Manager
Computer Systems Analysts	Call Center Technical Analyst
Computer Systems Analysts	Computer Lab Manager
Computer Systems Analysts	Human Resources Information Systems Analyst
Computer Systems Analysts	Human Resources Information Systems Consultant
Computer Systems Analysts	Human Resources Information Systems Specialist
Computer Systems Analysts	Information Specialist
Computer Systems Analysts	Information Systems Shift Supervisor
Computer Systems Analysts	IT Operations Support Analyst
Computer Systems Analysts	IT Strategy Consultant
Computer Systems Analysts	Lead Programmer Analyst
Computer Systems Analysts	Network Engineering Manager
Computer Systems Analysts	Oracle System Administrator
Computer Systems Analysts	PC Technician
Computer Systems Analysts	PeopleSoft Systems Administrator
Computer Systems Analysts	Process Analyst - Information Systems
Computer Systems Analysts	Programmer Analyst - Consulting

Continued...

What Business Needs

Standard Occupation:	Monster Occupation:
Computer Systems Analysts	SAP System Administrator
Computer Systems Analysts	Software Quality Assurance Analyst
Computer Systems Analysts	Sr. Human Resources Information Systems Analyst
Computer Systems Analysts	Sr. Network Infrastructure Engineer
Computer Systems Analysts	Sr. Programmer Analyst - Consulting
Computer Systems Analysts	Sr. Systems Analyst
Computer Systems Analysts	Systems Analyst
Computer Systems Analysts	UNIX Operations Analyst
Computer Systems Analysts	UNIX Operations Support Analyst
Computer Systems Analysts	Usability Testing Engineer
Computer Systems Analysts	Visual Basic Programmer
Computer, Automated Teller, and Office Machine Repairers	Client Service Specialist
Computer, Automated Teller, and Office Machine Repairers	Office Machine Technician
Computer, Automated Teller, and Office Machine Repairers	Workstation Technician
Data Entry Keyers	Data Entry Clerk
Data Entry Keyers	Data Entry Operator - Sales
Data Entry Keyers	Data Entry Operator I
Data Entry Keyers	Data Entry Operator II
Data Entry Keyers	Data Entry Operator III
Data Entry Keyers	Human Resources Information Data Specialist
Database Administrators	Database Administrator
Database Administrators	Database Analyst
Database Administrators	Database Architect
Database Administrators	Database Manager
Database Administrators	Database Specialist
Database Administrators	Oracle Database Administrator
Database Administrators	Oracle Database Architect
Database Administrators	SQL Database Analyst
Database Administrators	SQL Server Database Administrator
Database Administrators	Sr. Database Administrator
Database Administrators	Sr. Oracle Database Administrator
Database Administrators	Sybase Database Administrator
Database Administrators	System Security Technician
Database Administrators	Systems Security Specialist
Database Administrators	Cisco Network Engineer
Database Administrators	Disaster Recovery Analyst
Database Administrators	E-mail Administrator
Database Administrators	Exchange Administrator
Database Administrators	Hardware Installation Manager
Database Administrators	HP-UX Systems Administrator
Database Administrators	Lead Network Infrastructure Technician
Database Administrators	Lead Technical Support Engineer
Database Administrators	Linux Systems Administrator
Database Administrators	Network Administrator
Database Administrators	Network Analyst
Database Administrators	Network Console Operator
Database Administrators	Network Operations Manager
Database Administrators	Network Technician
Database Administrators	Novell System Administrator - Network
Database Administrators	Operations Technician - Insurance
Database Administrators	Security Administrator
Database Administrators	Sr. Network Administrator
Database Administrators	Sr. Systems Administrator
Database Administrators	Sr. Technical Support Engineer
Database Administrators	Sr. UNIX Administrator
Database Administrators	System Security Analyst
Database Administrators	Systems Administrator
Database Administrators	Systems Director
Database Administrators	Technical Support Engineer
Database Administrators	Technology Manager
Database Administrators	UNIX Administrator
Database Administrators	Web System Administrator
Database Administrators	Windows Systems Administrator

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Standard Occupation:	Monster Occupation:
Network Systems and Data Communications Analysts	Call Center Test Project Manager
Network Systems and Data Communications Analysts	Lead Network Consultant
Network Systems and Data Communications Analysts	Lead Network Design Engineer
Network Systems and Data Communications Analysts	Management Information Services Director
Network Systems and Data Communications Analysts	Network Consultant
Network Systems and Data Communications Analysts	Network Engineer
Network Systems and Data Communications Analysts	Network Firewall Security Analyst
Network Systems and Data Communications Analysts	NT Systems Administrator
Network Systems and Data Communications Analysts	Solaris Administrator
Network Systems and Data Communications Analysts	Sr. LAN Analyst
Network Systems and Data Communications Analysts	Sr. Network Consultant
Network Systems and Data Communications Analysts	Sr. Network Engineer
Network Systems and Data Communications Analysts	System Security Lead
Network Systems and Data Communications Analysts	System Security Manager
Network Systems and Data Communications Analysts	Telecommunications Systems Director
Operations Research Analysts	Clinical Data Specialist
Operations Research Analysts	Data Warehouse Business Consultant
Operations Research Analysts	Materials Analyst
Operations Research Analysts	Materials Supervisor
Operations Research Analysts	Operations Analyst - Manufacturing
Operations Research Analysts	Re-Engineering Methods Analyst
Operations Research Analysts	Sr. Data Warehouse Business Consultant
Telecommunications Equipment Installers and Repairers, Except Line Installers	Cell Site Technician
Telecommunications Equipment Installers and Repairers, Except Line Installers	Central Office Power Installer
Telecommunications Equipment Installers and Repairers, Except Line Installers	Central Office Switch Technician
Telecommunications Equipment Installers and Repairers, Except Line Installers	Central Office Technician
Telecommunications Equipment Installers and Repairers, Except Line Installers	DSL Installer
Telecommunications Equipment Installers and Repairers, Except Line Installers	Fiber Optics Installer
Telecommunications Equipment Installers and Repairers, Except Line Installers	PBX Installer
Telecommunications Equipment Installers and Repairers, Except Line Installers	Switching and Transmission Engineer
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications Analyst
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications Service Tester
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications Site Acquisition Specialist
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications Site Switch Technician
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications Specialist
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications Technician
Telecommunications Equipment Installers and Repairers, Except Line Installers	TV Repair Technician
Telecommunications Line Installers and Repairers	Cable Service Technician

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