Information Technology (IT) Services describes companies that are primarily engaged in the production or management of information technologies. Industry codes and descriptions are included in the sidebar. Information Technology Services provide a key business function in today’s knowledge economy. Much more than setting up computers and other hardware, these firms help businesses better use technology in all aspects of company operations.

An Economic Driver
In 2009, Missouri’s IT Services firms employed 35,797 direct jobs in the state and contributed nearly $8 billion in Personal Income and an estimated $20 billion annually in Gross State Product. The direct workers generated an estimated 127,000 indirect and induced spin-off jobs annually in Missouri through purchases of industry intermediate inputs and employee consumer spending.

IT Services Employment by County in 2009

1 While IT Services firms are the largest employers of IT professionals, Company Headquarters (NAICS 5511) are the second largest. IT Services are incorporated into other industries, particularly headquarters, telecommunications, government and hospitals, where the primary activity of the business is not information technology. As this issue occurs in every state, reporting of IT Services is under counted to some degree.
Employment
Missouri is home to 3,500 IT Services firms. This is a nearly 8 percent increase in the number of firms between 2008 and 2009. While industry employment dropped by 6 percent during the same period, the average annual wage increased from $76,267 to $80,558.

IT Services Firms in 2009

<table>
<thead>
<tr>
<th>NAICS</th>
<th>Industry Description</th>
<th>Missouri</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>511210</td>
<td>Software Publishers</td>
<td>209</td>
<td>13</td>
</tr>
<tr>
<td>518210</td>
<td>Data Processing &amp; Related Services</td>
<td>269</td>
<td>41</td>
</tr>
<tr>
<td>519130</td>
<td>Internet Publishing/Web Portals</td>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td>541511</td>
<td>Custom Computer Programming</td>
<td>1,198</td>
<td>6</td>
</tr>
<tr>
<td>541512</td>
<td>Computer Systems Design</td>
<td>1,324</td>
<td>9</td>
</tr>
<tr>
<td>541513</td>
<td>Computer Facilities Management</td>
<td>44</td>
<td>17</td>
</tr>
<tr>
<td>541519</td>
<td>Other Computer Related Services</td>
<td>356</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>3,500</td>
<td>10</td>
</tr>
</tbody>
</table>

The state’s top IT Services occupations for 2009 were Software Engineers (14,860), Computer Systems Analyst (9,960) and Programmers (8,477). Combined these occupations accounted for 93 percent of the sector’s employment. These well paying jobs averaged a statewide wage of $73,913.

From 2004 to 2009 Missouri’s IT Services employment increased at an annual rate of 2.2 percent to add a total of 3,530 new jobs. The Computer Systems Design industry grew the most in absolute jobs (1,732) and was followed by Custom Computer Programming (689) which grew 2 percent per year. Although Computer Facilities Management Services saw a decrease in actual jobs, it was the only Missouri IT Services industry to have an annual loss compared to three Industries nationally. The combined employment of Computer Systems Design, Data Processing and Custom Computer Programming is 84 percent of the sector’s total employment in Missouri. The combined average wages of the top three employing industries was $82,568.
Regional and National Advantages
Missouri offers some strategic advantage in terms of IT Services operations, wages and employment concentrations. Typically industry concentrations are compared against a national benchmark using Location Quotient (LQ) analysis however in this case a Midwestern LQ was calculated to demonstrate Missouri’s regional significance (see sources for more details). The historic dominance of larger west coast states, like Washington and California, in IT Services is well known as are east coast states such as Massachusetts and Virginia. However, businesses may choose to locate in the Midwest to take advantage of a central U.S. location so comparing Missouri in the context of the region was important.

Missouri has an IT Services LQ of 0.88 against a national benchmark and an LQ of 1.31 against a Midwest benchmark. Missouri hosts higher Midwest concentrations in five IT Services industries. When Missouri is considered within the context of the lower Midwest region the state has the second highest employment in IT Services and the second highest overall sector concentration. Between 2004 and 2009, and against a national benchmark, Missouri saw an approximately 10 percent increase in its concentration of Software Publishers and Data Processing and Related Services. For the same time period Other Computer Related Services saw a 49 percent increase in concentration.

Corporations Choose Missouri
National corporations choose Missouri for their IT Services operations.

Expedia - Springfield
Opened a new operations facility, in 2010, at Springfield-Branson National Airport, to house 500 new customer support jobs.

Harris Corp. - St. Louis
Opened a facility, in 2009, to expand their international communications and information technology capacity to serve the National Geospatial-Intelligence Agency (NGA) and other federal agencies in the area.

IBM - Columbia
Announced the creation of 800 jobs by 2012 to staff their new data storage and service center.

Unisys - St. Louis
Announced the creation of 300 high-tech jobs by 2010 to staff a new information technology center.

IT Services in the Midwest

- Nebraska
  - EMP: 15K
  - LQ: 1.6

- Iowa
  - EMP: 13K
  - LQ: 0.9

- Kansas
  - EMP: 13K
  - LQ: 1.0

- Missouri
  - EMP: 36K
  - LQ: 1.3

- Illinois
  - EMP: 72K
  - LQ: 1.2

- Indiana
  - EMP: 19K
  - LQ: 0.7

- Kentucky
  - EMP: 18K
  - LQ: 1.0

- Tennessee
  - EMP: 18K
  - LQ: 0.7

- Arkansas
  - EMP: 9K
  - LQ: 0.8
Missouri hosts higher Midwest concentrations in five IT Services industries. When Missouri is considered within the context of the lower Midwest region the state has the second highest employment in IT Services and the second highest overall sector concentration. Nebraska has a higher LQ for IT Services but its sector employment is 21,000 less than Missouri. Illinois is third in sector concentration but has twice as many sector jobs as Missouri. Within the Midwest region, Missouri’s IT Services employment (35,797) accounts for 16 percent of all workers in the sector.

With nearly 11,000 workers, Missouri’s Data Processing and Related Services industry has over twice the employment rate as the national average. It is also more concentrated than both the lower Midwest (1.96) and national (2.19) benchmarks. Data Processing grew in Missouri over the past five years despite Midwest and U.S. industry declines. A likely reason for the increase is Missouri’s low electricity rates, as data processing requires a large amount of electricity to operate.

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**IT Services Concentrations and Wages in 2009**

<table>
<thead>
<tr>
<th>NAICS</th>
<th>Industry Description</th>
<th>Missouri Jobs</th>
<th>Midwest* Jobs</th>
<th>United States Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>511210</td>
<td>Software Publishers</td>
<td>2,785</td>
<td>1.72</td>
<td>0.54</td>
</tr>
<tr>
<td>518210</td>
<td>Data Processing &amp; Related Services</td>
<td>10,917</td>
<td>1.96</td>
<td>2.19</td>
</tr>
<tr>
<td>519130</td>
<td>Internet Publishing/Web Portals</td>
<td>339</td>
<td>1.01</td>
<td>0.20</td>
</tr>
<tr>
<td>541511</td>
<td>Custom Computer Programming</td>
<td>7,614</td>
<td>0.99</td>
<td>0.61</td>
</tr>
<tr>
<td>541512</td>
<td>Computer Systems Design</td>
<td>11,500</td>
<td>1.27</td>
<td>0.88</td>
</tr>
<tr>
<td>541513</td>
<td>Computer Facilities Management</td>
<td>739</td>
<td>0.86</td>
<td>0.67</td>
</tr>
<tr>
<td>541519</td>
<td>Other Computer Related Services</td>
<td>1,903</td>
<td>1.04</td>
<td>0.91</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>35,797</td>
<td>1.31</td>
<td>0.88</td>
</tr>
</tbody>
</table>

*Midwest - Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Missouri, Nebraska, Oklahoma, Tennessee

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**Electricity Advantage**

Missouri has competitive industrial electricity rates in the Midwest and has the 10th lowest rate per kilowatt hour nationally.

IT Services New Business Formations
A total of 442 IT Services firms were formed in Missouri during 2010, representing 3.3 percent of all newly employing firms in the state.\(^5\) The Saint Louis metropolitan area had the most IT Services start-ups with 110, followed by the Kansas City metropolitan area with 50 firms. The remaining IT Services business formations were either located in counties outside the two metros (43), formed in Missouri but had only out-of-state employees (2) or had statewide operations (237).

Eighty-three percent of all IT Services firms were started in Computer Systems Design (210) or Customer Computer Programming (159). There were no Internet Publishing/Web Portals firms started in 2010.

An interesting occurrence was the large number of statewide operation firms that accounted for 54 percent of all IT Services formations and a 15 percentage point increase over 2009 formations. These are out-of-state companies that choose to establish operations in Missouri but primarily work through contractors or consultants. These companies can hire individuals to do work anywhere in the state and are not tied to one physical location.

IT Services Outlook
IT Services is dominated by small, highly mobile firms employing a technically advanced workforce. Projections for IT Services occupations out to 2018 show an additional 4,000 jobs for the top five paying occupations. With average annual wages over two times the state’s average, IT Services is a crucial sector to support and grow in Missouri through targeted workforce development, a continued investment in the quality of place and entrepreneurial services.

\(^5\) Firms with at least one employee are tracked in the Quarterly Census of Employment and Wages (QCEW) program.
Sources

• Data for the cluster statistics, industry employment, location quotients, distribution of firms and county level employment is obtained from the QCEW.
• Business formations are gathered from the QCEW Form 2699, which tracks new companies to Missouri that are required to report under the Unemployment Insurance (UI) tax program. Firms are assigned an industry classification, or NAICS number, by the Labor Market Information team within MERIC.

US Department of Energy

Location Quotients
Location quotient (LQ) is a statistical measure of an industry concentration. The quotient indicates the geographical concentration of an industry in a region as a function of the expected concentration based on national average. Location Quotient was calculated using the BLS Regional Data Analysis Tool (RDAT). The LQ formula is:

\[
\text{LQ} = \left( \frac{\text{Region Industry Emp.}}{\text{Region Total Emp.}} \right) / \left( \frac{\text{U.S. Industry Emp.}}{\text{U.S. Total Emp.}} \right)
\]

LQ > 1 indicates an industry concentration.
LQ = 1 indicates expected concentration based on U.S. average.
LQ < 1 indicates no industry concentration.

Occupation Employment Projections
MERIC develops projections for almost 300 detailed industries at the statewide level. For the state MERIC develops projections for about 750 detailed occupations. Long-term projections cover a 10-year period and are developed every other year. Projections are developed for the state and 10 sub-state areas.

Acknowledgements
MERIC’s Economic Analysis Team researched the information for this report. The report was written by Meredith Hill and Alan Spell, data collection and analysis also included Tony Brite and Tom Reichart. Graphic Design was done by Maggie Bestgen.