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Challenges of IT Work Force Development

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LEADERSHIP

Challenges of IT Work Force Development

By: Don Hopkins, CIO of NCR, Chair of Greater Dayton IT Alliance Board of Trustees

The dynamics of the globally flat business environment have created some fundamental shifts in the staffing requirements of the IT market place. Many large companies are outsourcing IT development work, including off-shoring. As a result, such companies have eliminated apprenticeship programs that were feeder systems for higher level IT positions. In addition, the aging workforce in U.S. and Europe will leave a major void in experienced IT resources. According to Gartner Group, 76 million American workers will retire over the next two decades. Those vacancies will be filled by only 46 million workers, most of which will not have the required scientific, technology, engineering, or mathematical (STEM) skills necessary to fill these vacant positions. This problem trickles down to the small and mid size-companies.

The solution to the IT work force development problem is long-term. Currently, there is a high demand for IT resources with three to five years of experience. Sadly, these resources do not exist. In the 2001/2002 time frame, the enrollment in IT type university programs declined nationally by 39% and locally by more than 50%. The decline was even greater among women. In order to improve the supply of qualified candidates, it is necessary to reach back to high schools (and possibly earlier) to ensure students are acquiring the appropriate STEM skills to select a career in information technology. In today's global resource market, China is graduating approximately eight times more engineers than America, while India is graduating approximately five times as many. It is imperative to convince these high school students the demand for IT driven growth will outstrip the supply of qualified IT candidates in the near future. This supply pipeline, if fixed now, will require at least six to eight years to produce results.

Local universities must examine their curriculum to eliminate internal academic silos, provide more integrated programs, meet the external quest for future talent and determine how to affectively reach the digital natives that are moving into their universities. Gartner Group suggests some of the skills in the highest demand will be business process designers, enterprise architects, seasoned business analysts, information modelers and emerging technology advocates.

These challenges must be met both nationally and regionally to claim success in IT work force development.

Top Information Technology Needs in the Dayton Region in 2007

By: Claire Kerr, The Greater Dayton IT Alliance

The Tech Source business development program featuring an IT Resource Finder and Business-to-Business Referral Service has been connecting IT buyers and suppliers in the Dayton Region since its release in January 2006.

Tech Source provides a way to know who does what in IT in the Dayton region through profiles of IT suppliers. Companies can anonymously search for IT products, services or solutions by key word or drop down box and retrieve a list of IT suppliers that could meet their need in the Dayton region.

For 2007, Tech Source highlights include:

- 11,000 webhits as Dayton region businesses looked for IT partners
- 2,500 searches for specific products, services and solutions
- 87 IT companies included in the repository
- \$2M in closed business opportunities

The volume of IT searches regarding the web, staffing, hosting and ERP increased most significantly since 2006 and RFID is new to the list for 2007. The IT needs most frequently searched in Tech Source in 2007 are to the right.

If you need help finding an IT partner or to learn how your company can be listed in Tech Source, please contact Claire Kerr at 937-229-9092 or ckerr@gdita.org.

Rank	By Key Word	By Drop Down Category
1	Security	Staffing
2	ERP	Maintenance and Support
3	Staffing	Database Design
4	Networking	Desktops/PCs/Workstations
5	PHP	Cabling and Installation
6	Training	Hosting
7	CRM	Web Development
8	Oracle	IP Telephony
9	Java	Custom Programming
10	Web Development	Website Management
11	RFID	Content Management
12	Microsoft	System Integration
13	Software	Search Engine Optimization
14	Development	Application Testing
15	VOIP	Email/Internet Marketing
16	SQL	Requirements Analysis
17	Cabling	Computer Installation
18	Cisco	Web Performance Monitoring
19	Services	Database Administration
20	Support	ERP

