

# Hillsborough-Pinellas IT Gap Analysis:

Implementation Update, September 12, 2014

The Hillsborough—Pinellas IT Gap Analysis, published in October 2012, quantified the demand for 53 IT skill sets and positions. The Analysis also provided four primary recommendations to increase the pipeline of talent based on interviews, focus groups, and survey responses. The recommendations were:

1. Create Real World Training for High Demand Jobs
2. Streamline Internships for Tomorrow's Workforce
3. Promote Innovative Career Development, Recruitment, and Retention Practices
4. Establish Regional Marketing and External Recruiting

Below are a list of initiatives that have been undertaken since the release of the IT Gap Analysis:

- **TampaBayIntern.com** connects students to internship opportunities to help retain skilled talent to the area. The intern site was launched in March 2014. Internships offer employers a low risk opportunity to observe students and for students to gain valuable work experience.
- **CareerSource Pinellas and CareerSource Tampa Bay Internship Programs** can reimburse employers up to 80% of interns' wages for a period of up to 12 weeks. Funding will assist employers with implementing internship programs.
- **Tampa Bay Hi-Tech Program** offers funding for training in technical skill programs offered at Hillsborough Community College and St. Petersburg College. The technical skill training courses change each semester. The program was launched in April 2012 and has had 1,160 people complete training and receive a credential. Another 1,282 are currently enrolled in the program as of August 2014.
- **Tampa Bay IT Apprenticeship** provides apprenticeship opportunities for Applications Developers (software), Applications Developers (Web), Help Desk Technicians, and Network Support Technicians. Apprentices work full-time while participating in the program. They receive training two nights per week at either Pinellas Technical Education Center or Aparicio-Levy Technical Center. The training is offered at no cost to the apprentices and their employers. The first apprentices are set to begin in January 2015.
- **TBTF Student Chapters** offer students on-campus networking opportunities with fellow students and business leaders. The first chapter was established at the University of South Florida – St. Petersburg in January 2013. Currently, there are Chapters at four local colleges or universities, with plans to expand the Chapters to additional schools.
- **Tech Treks** provide students the opportunity to visit local companies, so that they are able to observe IT career opportunities in the region. Tech Treks began in April 2013, and are held two times per year. Students are provided with tour facilities; participate in discussions on the corporate culture, job and internship opportunities at the business; and learn about skills required to be successful in the companies.

○ **Curriculum Changes** were made at three local colleges or universities in response to the IT Gap Analysis. St. Petersburg College reviewed its curriculum and updated its IT programs to address in-demand skills. Hillsborough Community College updated its corporate training courses to ensure critical IT skills were being targeted. Keiser University established a new Bachelor of Arts in Business Analytics.

○ **MacDill Transition Center** was opened in August 2014 to better connect transitioning veterans to local employers. The Transition Center, which is supported by CareerSource Tampa Bay, offers recruitment events, job search assistance, resume review, and referrals to community partners and agencies.

○ **Exploratory Labs** are being developed as an opportunity to give highly engaged students the opportunity to gain experience by working on problems they might experience in the real world. The labs are being developed through a Business and Education Partnership. The result is that students will learn to apply technical skills with strategic thinking, network with businesses and help identify burgeoning talent. The exploratory labs will be piloted by Tech Data, St. Petersburg College, and TBTF.

The recommendations and their corresponding initiatives are listed on the following pages. At the time the report was published, the recommendations were prioritized according to level of urgency required: monitor, attention, or critical. Their priority level is shown on the recommendation pages as:

 Monitor

 Attention

 Critical

The implementation steps are color coded as green if the recommendation is being fully addressed, yellow if the recommendation is being partially addressed, and grey if the recommendation is not being addressed.

Recommendations	Initiatives Addressing Recommendations
<p><b>Real World Training for High Demand Jobs</b> - Employers reported a need to fill positions requiring specific technical skills. Students reported the desire to practice the technical skills they learn and to have access to the most current and beta versions of new technologies. Small and mid-size employers reported the need for graduates to have more technical skills.</p>	
<p>1. Create Exploration Labs for students to practice new skills learned in the classroom, boot camps, and online courses. Similar labs exist within specific colleges and focus on technology taught in the classroom. These labs will cross the boundaries of the individual institutions and engage student, faculty, and businesses in classroom learning, business use cases, and community competitions. ⊠</p>	Exploratory Labs
<p>2. Develop technical training programs, such as online and boot camp style opportunities for current high demand skills; Java, .NET, Agile development, cloud computing engineers, sales engineers, CRM and SharePoint. Prepare training in future areas of expansion including business analytics, big data, desktop support, computer and software engineers. Boot camp and online training should be supplemented with student-focused seminars to reinforce the skills learned. Market to IT professionals that are seeking updated skills employment. ⊠</p>	Curriculum Changes
<p>3. IT professionals will coordinate with educators to develop business use cases for high demand technical courses including boot camp style sessions, classroom coursework, and Exploration Labs. ☢</p>	Exploratory Labs
<p>4. Offer quarterly webinars by business experts on new technology to assist faculty and to engage with vendors regarding the application of the technology in the workplace. ☢</p>	This has become less of a priority, but still requires monitoring.
<p>5. Expand recruitment of returning Veterans and provide supplemental technical training. Increased coordination of career pathways and jobs available. ☢</p>	Tampa Bay Hi-Tech Program, MacDill Transition
<p>6. Participate in Department of Education recognized apprenticeship programs for high demand jobs. ⊗</p>	Tampa Bay IT Apprenticeship Program
<p>7. Expand the use of the IT Competency Model, the Framework for 21st Century skills, and STEM to provide both soft and technical skills for high school and college students to increase readiness to work. ⊗</p>	This is a long term recommendation that is being monitored, but not put into action.
<p><b>Streamline Internships for Tomorrow's Workforce</b> – New hires need to have more real world experiences with technologies, knowledge of enterprise systems, possess the right mix of academic and workplace competencies, and be proficient in multiple areas. Students are requesting more internship opportunities to allow for multiple internships to build a portfolio for graduation. Small to mid-size business are willing to offer internships but do not have the structure to manage these programs.</p>	
<p>8. Encourage use of social networking tools, such as LinkedIn, to advertise opportunities that would allow companies to post opportunities, faculty to recommend students, and students to find opportunities. Create a team of students, business owners, and educators to define the functionality and process of the online solution. ⊠</p>	Plan Modified—TBTF Chapters at schools have created this relationship and executed use of social media.

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9. Expand internship opportunities at all postsecondary institutions. While internships are offered at local colleges and universities, when students begin to increase participation through marketing efforts, more opportunities will be needed. ⊠	TampaBayIntern.com
10. Increase the capacity of career centers to provide students with career pathways and to be prepared to compete for internships earlier in their education. ⊗	Plan modified—TBTF Student Chapters demonstrate career pathways
11. Provide training to businesses on best practices for setting up internships. Include discussion with students to provide feedback on the “best” and “worst” internship experiences. ⊠	TampaBayIntern.com—Resource Page
12. Conduct internship fairs to connect students with employers. Motivate students to seek multiple internship opportunities throughout their college experience that will expand their knowledge, technical skills, and awareness of local businesses. ⊠	TampaBayIntern.com, TBTF Student Chapters
13. Businesses are requiring employees to have a broader range of leadership and technical skills. Motivate students seeking non-technical degrees to seek a double major/minor in the technology field. ⊗	TBTF Student Chapters
<b>Innovative Career Development, Recruitment, and Retention Practices:</b> To be competitive in the global market, business productivity requires the continuous acquisition of new skills that expand industry-wide technical competencies. New skills can be obtained through continuously available skills training and the re-training of talent with non-technical job experience.	
14. Leverage existing or new channels to recruit external IT Talent. Market the numerous communities of interest that will support the skills development of staff. Examples include: SQL, Oracle SharePoint, JAVA, .NET, and other programming and IT skill areas. ☢	Tampa Bay Hi-Tech Program
15. Develop a Talent Satisfaction Index that will quantify job/life/career satisfaction and job retention. Begin to measure why talent remains loyal to the company. ☢	Development of the Index has not begun.
16. Explore practices to encourage and support talent development and career growth (mentoring, lifelong learning, IT leadership training, and apprenticeship programs). ☢	Tampa Bay IT Apprenticeship, Exploratory Labs
17. Modify degree programs to accommodate students returning for a technical degree but have already completed non-technical degrees and have job experience. ⊗	Long-term recommendation that has not been put into action.
18. Explore the range of practices that will support healthy collaboration between businesses to foster an innovative community. ⊗	TBTF continuously monitoring

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<p><b>Regional Marketing and External Recruiting:</b> Companies are seeking talent with 3 - 5 years experience and knowledge of enterprise level development, whom require little supervision. Marketing the variety of IT career pathways will increase the local talent pool. The strengthening of relationships between education and business will increase the success of transition from school to the workforce. Innovation is a catalyst for an expanding the technology community along with engaging students, and attracting/recruiting experienced talent.</p>	
<p>19. Establish relationships with student organizations, such as TBTF Student Chapters at colleges and universities in Tampa Bay. 📍</p>	<p>TBTF Student Chapters</p>
<p>20. Initiate recruiting trips around high demand skills by conducting marketing campaigns to target cities and by attending convergence events, universities, or virtual events to increase the immigration of IT talent by marketing Tampa Bay nationally. Efforts will be coordinated with EDC groups to identify market information and resources. The campaign will use social media and technology networks. 📍</p>	<p>The promotion of the analysis and the recommendations will build the regions reputation as an IT hub.</p>
<p>21. Provide training to HR, recruiters, and career placement professionals to increase knowledge of how to market the Tampa Bay area to prospective candidates. Provide talking points and other collateral resources. 📍</p>	<p>All initiatives are impacting the awareness and marketing IT.</p>
<p>22. Conduct technology challenges/competitions for students and professionals to test their problem solving and technical skills, such as Hack-a-thons, code builds, etc. 📍</p>	<p>TBTF Student Chapters</p>
<p>23. Nurture and grow partnerships between K-12, universities, colleges, and community colleges and all size businesses to expose students to career options by conducting career exploration fairs connecting to programs, such as TechPath. 📍</p>	<p>As initiatives are implemented, relationships will strengthen.</p>
<p>24. Managing a “Listening Post” that has continual feedback on the links between students, education, and business. Measure the progress on the implementation of the strategies. 📍</p>	<p>CareerSource is working with partners to track progress and receive feedback.</p>
<p>25. Conduct a Parent/Business event that will bring parents and business and educational leaders together to discuss career options. Have a panel of business leaders describe the skills needed</p> <ul style="list-style-type: none"> <li>• Have educators describe the curriculum offered</li> <li>• Include extracurricular opportunities—aftercare and summer programs</li> <li>• Conduct in the spring before the traditional summer camp selections are made. 📍</li> </ul>	<p>TBTF Student Chapters and Tech Treks are increasing the interactions between industry and families.</p>