



By Tasha Phelps

Women in the World of Technology – Has the Paradigm Shifted?

Many might loosely define technology as “the greatest evolution in the last century.” After all, it has certainly become a staple of not only our life-styles, but also a key component to our economy. In the last decade alone, the entire globe has traveled through many cycles of both progression, and growth.

It's true, that there is a stigma that the world of technology is a “a man's domain,” but women in the Indianapolis area have a different perspective. Fortunately, the industry has excelled through a paradigm shift that not only INCLUDES women, but recognizes and acknowledges the contributions that women have made to the industry. Right here in Indianapolis, there is an organization comprised of women that have achieved significant levels of success in the technology and related fields. Women & Hi-Tech (www.womenandhitech.org) has been in existence since 2000, and “was created to address the specific needs of women in high tech industries in Central Indiana and to encourage more women to consider careers in technology.”¹

What's most exciting about peeking into the careers of women in technology, is that the spectrum of opportunity has exponentially grown in the two last decades. As far back as 1985, careers in technology were, for the most part, centered around programming. Jumping into the 1990's careers began to evolve into application development, and when the “DOT COM” era hit, the world was on its heels. Web development, database administration, and digital internet marketing began to evolve as careers that took on a more practical stance to the utilization of technology. They also allowed for the growth of the business professional to enhance their skill set with the understanding of a new “business practice.”

Karen Zwick, owner of 1st Class Solutions in central Indiana, notes that, “dealing with organizational change is never easy and can create a performance gap which is often reflected in the bottom line. However, it can also be the source of great opportunity for any organization.” With over 30 years of experience as an educator, Zwick used her technology expertise to start her company in 1995. She continued to share that her early experiences in the industry were quite different than in today's market, because the social pressures of women in technical fields are less intense as they were in the in the mid '80s.

Let History Tell the Story!

The National Center for Women in Technology (www.ncwit.org) recently compiled statistics and published a report noting²:

- 51% Percent of professional occupations in the 2006 U.S. workforce held by women vs. 25% Percent of professional IT-related occupations in the 2006 U.S. workforce held by women
- 37% Percent of 1985 Computer Science undergraduate degree recipients were women vs. 14% Percent of 2006 Computer Science undergraduate degree recipients at major research universities were women

So why the (seemingly significant) gap?

It is likely because the spectrum of careers has grown to be quite diverse. Technology professionals (in general) don't necessarily have to have a “technical” degree, but they are REQUIRED to have an understanding to effectively

(continued on page 2)



(June 2008 - Continued from page 1 "Women in the World of Technology – Has the Paradigm Shifted?")

use it. In the same statistical report, the National Center for Women in Technology predict that 1,000,000 new jobs will be added to the US workforce by 2014, yet only 50% of them will be jobs for which US universities will graduate candidates with bachelor's degrees.

So how do young women who show an interest and passion for technology overcome the challenges?

Mentor / Protégé Programs!

Central Indiana is fortunate to have such a vast array of resources for young women to tap into as they either enter their collegiate career, or as they graduate with a degree and enter the workforce.

The best lesson learned, however, is that success won't just "fall in your lap." For women who have the aptitude and dedication to making this career path work, the key is to network and align yourself with others in the I.T. industry that have been successful with their own respective career paths.

Jennifer Ruby, a successful technology integrator, credits "being in the right place at the right time" (among other things). She recalls first being exposed to programming at Purdue University in the early 1990's where she fell in love with the digital side! "After graduating, I ended up getting a job with the state of Indiana, and one of my first responsibilities as part of a database team, led me to become known as a "guru." (Inevitably) over the evolution of my tenure with the state, I was exposed to technologies like GIS, and how it could be managed for growth and sharing of information. I got really good at being able to understand the technology and translate it."

As her career continued to develop, she moved to the city as a Sr. Technology Planner. There were a lot of advancements being made while she was there, (cable and VOIP as examples) but when asked about significant memories, she credits the city's CIO (her then supervisor) for giving her inspiration. She says that because he identified (in her) that she had the capacity to collect, analyze and regurgitate information for strategic purposes, she has, now, become a successful entrepreneur.

Q: Do you recall any significant GENDER issues related to your professional growth in technology?

RUBY: I.T. (Information Technology) is a GREAT industry for women. I wasn't really even thinking about "women being in technology" (in terms of gender) until 2005. Technology has just been growing so much, that I would say that I was just one of the FEW women that were in the industry.

As evidence of Ruby's growth and recognition in the industry, she was recently appointed to the Indianapolis/Marion County Information Technology Board. She, along with other women on the board, are now in position to make recommendations and decisions for the City's utilization of technology.

Both Zwick and Ruby agree that the POTENTIAL for gender conflict may be more present when in front of senior management. Though the numbers of women in technical positions has exponentially grown, still today, there are fewer senior management (technical) positions held by women. Ruby predicts that a trend is likely to evolve where we'll start seeing more women ENTREPRENEURS than women in management positions in technology.

The economy is certainly primed for entrepreneurship, and the Indianapolis landscape has proven to be conducive and encouraging for developing small business.

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