# Career Paths for Programmers

I recently interviewed for a Business Analyst position with the CIO of a large multi-national software development firm. This man was in charge of the company's worldwide IT operations, including offshore development projects, for which he was searching for qualified Business Analysts. The interview quickly became a casual conversation about current trends within the IT service sector, how the company was planning to take advantage of those trends, and, most importantly, how I could fit into those plans. It was during his evaluation of my skills that I asked how I fit and whether it was technical or business skills that were most valuable to his projects. The CIO summed up his advice about my career path with one small sentence: "Stay on the business side."

Business skills, in this CIO's view, were most important to his future projects and the industry as a whole. His reasoning was that he could train anyone in the technical skills he needed for a project, but finding those people with the necessary business skills to guide an IT project to success was something that could not easily be obtained. He went on to say that he found it difficult to find people who could communicate on even the most basic of levels. I asked if my background as a developer would help in getting a business analyst job, and he conceded that although it's not a requirement, it certainly would help matters as long as I could prove that I wasn't "too technical."

His comments are consistent with the trend that all US-based programmers have observed since the late 1990's: global salary competition amongst programmers, and a growing view in big business of programming as a commodity skill. It's hard to compete with a developer in Russia or India who can work for a fraction of what I make minus benefits. The CIO managed to reaffirm the subtle, but major, shift from technical skills to business-technical skills in today's labor market. I gave weight to his viewpoint since the people in his position are the trendsetters of the technology industry. They are the ones who set the directives for a company's IT needs, and often, the requirements desired for the higher-paying positions.

I did a little research and found that the US Bureau of Labor Statistics Occupational Outlook Handbook predicts that computer systems analysts are expected to be among the fastest growing occupations through 2012. The Handbook describes a systems analyst as someone who may plan and develop new computer systems or devise ways to apply existing systems' resources to additional operations. It describes a computer programmer as someone who writes programs according to the specifications determined by systems analysts. (The book does not separately list business analyst as an occupation.)

According to the Handbook, in the US systems analysts held an astounding 487,000 positions in 2004 (up from 468,000 positions in 2002) compared with 455,000 jobs in 2004 for computer programmers (down from 499,000 in 2002). The Handbook also states that employment for computer programmers is "expected to grow much more slowly than that for other computer specialists." And recent estimates by the Economic Policy Institute have put the number of jobs being offshored at approximately 330,000 to 500,000 jobs. About 100,000 of those were full-time computer programming jobs.

The key to maintaining a good employment outlook in IT, it seems, is to move out of programming and up into more business-oriented IT positions such as systems analyst, business analyst, project manager, or systems architect. However, a computer programmer can't just decide to become a systems analyst or project manager overnight. The journey takes time and requires the right amount of experience and learning to be successful.

## Making the Shift

So, you've seen the statistics and watched as the jobs in your market slowly disappear. You want to move more to the "business side," but you don't quite know how to do it. As I'll describe next, making the shift can be done on-the-job by gaining more responsibility, polishing up your problem-solving skills, and using creativity in your work.

I began my journey into systems analysis and design by accepting more responsibilities throughout the project I was on when things proved too overwhelming for my superiors. I gradually accepted more of the project management and business analysis responsibilities when the opportunity presented itself. For example, I would walk to Suzy in accounting and work out a new enhancement with her one-on-one rather than wait for my manager to do so. Over time, as my manager's confidence in my abilities grew, these responsibilities became a part of my job. It wasn't long before I became the Programmer Analyst, and ultimately the Project Manager, as new positions were created to fulfill demand for our work.

When the need arises, I recommend walking to the end user yourself and working with her one-on-one. Your manager will be relieved when he discovers that you are capable of communicating with his end-users, identifying their issues, and resolving those issues before they are brought up in the weekly manager's meeting. Even the best IT managers need a subordinate who is visible to the users who they can trust to get the job done. If a manager is slowly factoring himself away from the day-to-day workings of the project, welcome it. The higher visibility that you are obtaining can be translated into higher value—and that can result in a promotion. Over time, your increased interactions with more business-oriented people will make you more sensitive to business concerns.

A good subordinate has to be open-minded and creative. When solving problems, one has to always believe that there is a way to accomplish something, even if it's never been done before. Sometimes, just listening to the user will produce an idea. A lot of issues may come down to the business process that the system is attempting to replicate. I have had users actually solve a business problem for me just by listening to what they had to say!