Computer Information Systems – Where Business meets Technology

Of all the technology degrees available the degree in Computer Information Systems (CIS) is arguably the most broad and most diverse. It provides just about anyone with an interest in working with technology the opportunity to do just that.

Typically CIS degrees are made up of half business courses and half technology courses. The reason for this is that CIS programs are designed to teach students how to solve business problems using technology.

Unlike computer science or computer or software engineering, which are specialty degrees, CIS is an applied business degree. Its graduates must know both the fundamentals of technology and the fundamentals of business. In one sense, CIS majors are the communication liaisons between the geeks of computer science and the profit hungry entrepreneurs of business. Business courses taken by the CIS major include accounting, marketing, finance, economics, management, and statistics. Technology courses that are taken include programming, database, networking, systems analysis, and web development.

The CIS graduate has one of the broadest working opportunities available, depending on the electives and specialties they chose to focus on. The business background allows CIS graduate to apply for technically oriented positions in every business field including finance, accounting, and marketing. It also allows them to qualify for more technical positions such as programming, database, security, and web development.

Let’s discuss some of the employment options in more detail.

From the Business Side:

In today’s world every job in business requires knowledge of technology. Ask any business student, “What do you expect to be on your desk at work?” The answer: “A computer.” Next, ask, “What does the employer expect?” The answer: “That you know how to use the computer.”

Whether it’s accounting, marketing, finance, or management they all require the knowledge of how to use a computer. And the more you know how to use it, the more valuable you are to the company. There are a host of business positions in the various fields that require both sets of business and technical skills that CIS graduates have. For example auditing, financial model development, marketing research, and project management just to name a few. Think about this. In today’s economic environment many people have been laid off. However, the work that those people did still has to get done. So how are companies getting all that work done with fewer people? In some cases the remaining people are working harder, faster and
longer. But in most cases, businesses are developing computer applications to replace the
people. So if you are the person that knows technology, you are the person that they will keep.
And if you are very entrepreneurial, if you can identify ways to develop new applications to
make your job easier, faster, or better, then not only will the company support you but you may
have the opportunity to start your own company selling that idea to other companies!

From the Technology Side:

There’s a reason 8 of the top 20 richest Americans all made their fortunes from IT, it’s
because the importance of IT in aspect of our lives is growing. Just look at how much it has
affected your life. Facebook, Google, mobile phones, mobile computing, Netflix, YouTube, and
Hulu are all just examples of the success that is possible for someone interested in technology.
Every single one of these companies requires all the wide variety of technology skills covered in
CIS: programming, database, data mining, networking, security, web development, application
development, and a host more.

Think about this, in 2004 Google employed 2,686, today they employ 19,835. Facebook
employed 6 people in 2004 and today they employ over 1,700. What these examples illustrate is
that successful technology ideas lead to lots of technology jobs. And also, at the same time,
there is an increase in technology retirements creating even more job opportunities. Of the top
100 new companies selected by entrepreneur.com, 28 are technology based. All this means is
that the opportunities for jobs in technology are growing and changing and your success is totally
in your control.

If you have any questions, comments, suggestions, or would like further information
please feel free to contact me.

Dr. David Wierschem
Chair - Department of CIS & QMST
McCoy College of Business Administration
Texas State University-San Marcos
601 University Drive
San Marcos, Texas 78666
512-245-3223
512-245-1452 (fax)
dw50@txstate.edu
www.mccoy.txstate.edu