Computer Information Systems – Data Analytics

Business analytics (BA) refers to the skills, technologies, applications and practices for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning. Business analytics focuses on developing new insights and understanding of business performance based on data and statistical methods. In contrast, business intelligence traditionally focuses on using a consistent set of metrics to both measure past performance and guide business planning, which is also based on data and statistical methods.

Business analytics makes extensive use of data, statistical and quantitative analysis, explanatory and predictive modeling, and fact-based management to drive decision making. Analytics may be used as input for human decisions or may drive fully automated decisions.

In the world of information technology, the business analyst will analyze the organization’s business model to determine how it integrates with technology. The idea is to determine the organization’s business needs or objectives, and then improve the effectiveness of IT in meeting those needs/objectives.

Sample Job Titles:

- **Entry-Level**
  - Business Analyst
  - Business Technology Analyst
  - Systems Analyst

- **Mid-Level**
  - IT Business Analyst
  - Business Intelligence Analyst
  - Data Mining Specialist

- **Pinnacle**
  - Senior Business Analyst
  - Director of Analytics & Business Intelligence
  - BAQ Sr. Consultant

Skills/Experience Required:

- Strong Quantitative Skills
- Complex Problem Solving
- Deductive and Inductive Reasoning Skills
- Analytical, Creative, and Innovative
- Technically Savvy

Professional Associations/Certifications:

- Bachelor of Science degree in Computer Information Systems (BSIS) with options in Information Systems and Information Technology
- Master of Science in Information Systems (EMSIS and PMSIS)
- Minor in CIS
- INFORMS – Institute for Operations Research and Management Science
Starting Salaries/Trajectory:
NACE 2015 average starting salary: $61,287 (Bachelor’s) 71,140 (Master’s)
BLS 2014 average salary: $136,280

*Note: Salaries are highly dependent on location, company type, and candidate experience/education. For the purposes of this guide, we are providing average starting salaries as determined by the National Association of Colleges and Employers (NACE) and Labor Bureau (BLS)

Industry Research Tools:
- blogs.sas.com/content/
- tdwi.org/
- informs.org/

Job and Internship Search Sites:
- bijobs.com
- bx.businessweek.com/business-analytics/jobs/
- linkedin.com/skills/skill/Business_Analytics
- jobs.monster.com/v-business-q-business-analyst-jobs.aspx