Case Study: “Crystal Ball, Clairvoyant, Fortune Telling…Can Predictive Analytics Deliver the Future”

1. The role of neural networks in predictive analytics is to analyze current and historical data. This data can then be used to make predictions about the likelihood of the occurrence of future events.

   The role of neural networks in predictive analytics for Blue Cross Blue Shield of Tennessee is used to predict which health care resources will be needed by which postoperative patients months and years into the future. Neural networks can help predict the likelihood of future events for Blue Cross Blue Shield of Tennessee because by using artificial intelligence, it can predict any health issue trends. This information can then be used to help treat any medical diseases among patients.

   The role of neural networks in predictive analytics for FedEx is used to in three ways. First, it predicts how customers would respond to its new products and services. Second, the neural networks can predict which customers will no longer use FedEx due to a price increase. Lastly, the neural networks can predict how much additional revenue the company can attain from certain drop box locations. These predictions can be used for future events to figure out what additional products and services would be most successful in the market by targeting them more towards the customers that respond to the new products and services.

   The role of neural networks in predictive analytics for the University of Utah is used to generate alumni donations. The predictive analytics system determines which 300,000 alumni are most likely to respond to the annual donation appeal. The neural networks can help predict the future by generating a list of the selective 300,000 alumni that respond to the donation appeal, and target the appeal to only those responsive alumni.
3. I believe that using DNA information for the government to place people on various career tracks based on the system’s recommendations is both good and bad use of technology.

This is good use of because predictive analytics are used to analyze data to help make predictions for the future. DNA information may be useful in determining a person’s level of education that he or she is recommended to complete because a part of person’s interests and hobbies connect to a person’s DNA makeup. Therefore, an enjoyable career for a person may be related to a career that of his or her parents. By looking at genetic trends in careers chosen by the older generation in a family, the government can use the DNA information to help those who are unsure of which career to pursue in the future.

This is bad use of predictive analytics because a person may not want to grow up and follow in the same career path as his or her parents. By using the DNA information, the system will come up with careers mainly related to those of the person’s parents. Although there may be patterns in the career fields chosen within a family, there is usually one person in a family that is not exactly like everyone else related to him or her. Therefore, this person would be more likely to pursue a career in a different field than his or her relatives. If a person were to work in the career field chosen through DNA information, he or she may not enjoy it as much as working in a career field of their choice. This is because working in a career field chosen by someone else is not a person’s personal dream in the career industry.

Personal tests are different from using DNA information to predict the future because personal tests ask various personal questions, rather than using historical data to predict a person’s future. Personal tests take more into account what the individual taking the test enjoys doing as leisure activities rather than what the previous generations enjoyed to predict a person’s possible career path. Personal tests results can be more individualized because the
results depend on the individual’s personal answer, rather than the answer of a relative in the previous generations.