The safety and reliability of operations is one of the core values at BP. Databases continue to be developed and expanded. It is important to use effective statistical tools to estimate failure times and probabilities to enable planning for repair and replacement of equipment and to quantify risk for critical operations. This is an excellent and comprehensive book on reliability methods and their application.

Concern for and preservation of the environment in which BP operates is a core value and a distinguishing characteristic, compared to other petrochemical companies. This book elucidates a fundamental aspect of environmental data: the obtaining of numerical measurements that represent the true state of affairs as accurately as possible.

At chemical plants, gas plants, refineries, even in technology, large databases are available everywhere for learning about how to make improvements and maximize profitability. Effective utilization of multivariate statistics is essential. This is an excellent comprehensive book for applied multivariate analysis.

BP is essentially a federation of many business units which are dispersed all over the world. There is endless opportunity and need for more sophisticated usage of business modeling. This is still my favorite book on modern time series methods for business and economic applications.

The Elements of Statistical Learning, T. Hastie, R Tibshirani, and J Friedman, 2001, New York, Springer
Computational capabilities that are accessible and cheap provide the means for wholly new statistical methodologies. This is the first book by statisticians that has been devoted to new ways of learning from data. Though difficult because of a high mathematical level, this book provides a statistical basis and context for many methods that have been developed outside of the statistical community.