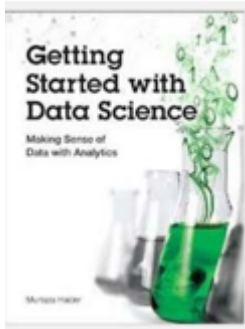**Course Text Book: 'Getting Started with Data Science' Publisher: IBM Press; 1 edition (Dec 13 2015) Print.**

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Prescribed Reading: Chapter 3 Pg. 52-53

The Final Deliverable

The ultimate purpose of analytics is to communicate findings to the concerned who might use these insights to formulate policy or strategy. Analytics summarize findings in tables and plots. The data scientist should then use the insights to build the narrative to communicate the findings. In academia, the final deliverable is in the form of essays and reports. Such deliverables are usually 1,000 to 7,000 words in length.

In consulting and business, the final deliverable takes on several forms. It can be a small document of fewer than 1,500 words illustrated with tables and plots, or it could be a comprehensive document comprising several hundred pages. Large consulting firms, such as McKinsey[4] and Deloitte,[5] routinely generate analytics-driven reports to communicate their findings and, in the process, establish their expertise in specific knowledge domains.

Let's review the *United States Economic Forecast*, a publication by the Deloitte University Press.[6] This document serves as a good example for a deliverable that builds narrative from data and analytics. The 24-page report focuses on the state of the U.S. economy as observed in December 2014. The report opens with a "grabber" highlighting the fact that contrary to popular perception, the economic and job growth has been quite robust in the United States. The report is not merely a statement of facts. In fact, it is a carefully crafted report that cites Voltaire and follows a distinct theme. The report focuses on the "good news" about the U.S. economy. These include the increased investment in manufacturing equipment in the U.S. and the likelihood of higher consumer consumption resulting from lower oil prices.

The Deloitte report uses time series plots to illustrate trends in markets.[7] The GDP growth chart shows how the economy contracted during the Great Recession and has rebounded since then. The graphic presents four likely scenarios for the future. Another plot shows the changes in consumer spending. The accompanying narrative focuses on income inequality in the U.S. and refers to Thomas Pikkety's book on the same.[8] The Deloitte report mentions many consumers did not experience an increase in their real incomes over the years, while they still maintained their level of spending. Other graphics focused on housing, business and government sectors, international trade, labor and financial markets, and prices. The appendix carries four tables documenting data for the four scenarios discussed in the report.

Deloitte's *United States Economic Forecast* serves the very purpose that its authors intended. The report uses data and analytics to generate the likely economic scenarios. It builds a powerful narrative in support of the thesis statement that the U.S. economy is doing much better than what most would like to believe. At the same time, the report shows Deloitte to be a competent firm capable of analyzing economic data and prescribing strategies to cope with the economic challenges.

Now consider if we were to exclude the narrative from this report and presented the findings as a deck of PowerPoint slides with eight graphics and four tables. The PowerPoint slides would have failed to communicate the message that the authors carefully crafted in the report citing Piketty and Voltaire. I consider the Deloitte's report a good example of storytelling with data and encourage you to read the report to decide for yourself whether the deliverable would have been equally powerful without the narrative.

Now let us work backward from the Deloitte report. Before the authors started their analysis, they must have discussed the scope of the final deliverable. They would have deliberated the key message of the report and then looked for the data and analytics they needed to make their case. The initial planning and conceptualizing of the final deliverable is therefore extremely important for producing a compelling document. Embarking on analytics, without due consideration to the final deliverable, is likely to result in a poor-quality document where the analytics and narrative would struggle to blend.

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Change log

Date	Version	Changed by	Change Description
2020-10-07	2.0	Malika Singla	Migrated to GitLab