CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A method for managing visualizations of data using one or more processors that execute instructions to perform actions, comprising:

providing one or more visualizations based on data from a data source, wherein the one or more visualizations include one or more marks that are associated with one or more values from the data source;

determining a mark-of-interest from the one or more marks based on one or more characteristics of the one or more marks and the one or more visualizations;

employing one or more assessment models to generate one or more assessment results for the one or more assessment models based on the mark-of-interest and the data from the data source, wherein each assessment result is associated with one or more scores that are based on a fit to the data from the data source and a predicted value of the mark-of-interest;

evaluating data associated with the mark-of-interest that is included in the data source and omitted from the visualization;

generating a portion of the one or more assessment results based on the evaluation;

rank ordering the one or more assessment results based on their association with the one or more scores; and

providing a report that includes the rank ordered list of the one or more assessment results.

2. The method of Claim 1, wherein generating the one or more assessment results, further comprises:

generating one or more natural language narratives that describe one or more characteristics of the mark-of-interest based on its assessment and one or more narrative templates; and

including the one or more natural language narratives in the one or more assessment results.

3. The method of Claim 1, wherein providing the report, further comprises, generating one or more other visualizations that are associated with one or more of the one or more assessment models, the one or more assessment results, or the mark-of-interest.

4. The method of Claim 1, further comprising:

monitoring feedback information that is associated with the report;

providing one or more other scores based on the feedback information; and

employing the one or more other scores to determine one or more modifications to the one or more assessments results.

5. The method of Claim 1, further comprising, filtering the one or more assessment results based on the one or more scores, wherein each assessment result associated with a score that is less than a defined threshold value is excluded from the report.

6. The method of Claim 1, wherein determining the mark-of-interest further comprises:

automatically analyzing the one or more values associated with the one or more marks; and

determining the mark-of-interest based on the automatic analysis.

7. A processor readable non-transitory storage media that includes instructions for managing visualizations, wherein execution of the instructions by one or more processors, performs actions, comprising:

providing one or more visualizations based on data from a data source, wherein the one or more visualizations include one or more marks that are associated with one or more values from the data source;

determining a mark-of-interest from the one or more marks based on one or more characteristics of the one or more marks and the one or more visualizations;

employing one or more assessment models to generate one or more assessment results for the one or more assessment models based on the mark-of-interest and the data from the data source, wherein each assessment result is associated with one or more scores that are based on a best fit to the data from the data source and a value of the mark-of-interest;

evaluating data associated with the mark-of-interest that is included in the data source and omitted from the visualization;

generating a portion of the one or more assessment results based on the evaluation;

rank ordering the one or more assessment results based on their association with the one or more scores; and

providing a report that includes the rank ordered list of the one or more assessment results.

8. The media of Claim 7, wherein generating the one or more assessment results, further comprises:

generating one or more natural language narratives that describe one or more characteristics of the mark-of-interest based on its assessment and one or more narrative templates; and

including the one or more natural language narratives in the one or more assessment results.

9. The media of Claim 7, wherein providing the report, further comprises, generating one or more other visualizations that are associated with one or more of the one or more assessment models, the one or more assessment results, or the mark-of-interest.

10. The media of Claim 7, further comprising:

monitoring feedback information that is associated with the report;

providing one or more other scores based on the feedback information; and

employing the one or more other scores to determine one or more modifications to the one or more assessments results.

11. The media of Claim 7, further comprising, filtering the one or more assessment results based on the one or more scores, wherein each assessment result associated with a score that is less than a defined threshold value is excluded from the report.

12. The media of Claim 7, wherein determining the mark-of-interest further comprises:

automatically analyzing the one or more values associated with the one or more marks; and determining the mark-of-interest based on the automatic analysis.

13. A system for managing visualizations:

a network computer, comprising:

a transceiver that communicates over the network;

a memory that stores at least instructions; and

one or more processors that execute instructions that perform actions, including:

providing one or more visualizations based on data from a data source, wherein the one or more visualizations include one or more marks that are associated with one or more values from the data source;

determining a mark-of-interest from the one or more marks based on one or more characteristics of the one or more marks and the one or more visualizations;

employing one or more assessment models to generate one or more assessment results for the one or more assessment models based on the mark-of-interest and the data from the data source, wherein each assessment result is associated with one or more scores that are based on a best fit to the data from the data source and a value of the mark-of-interest;

evaluating data associated with the mark-of-interest that is included in the data source and omitted from the visualization;

generating a portion of the one or more assessment results based on the evaluation;

rank ordering the one or more assessment results based on their association with the one or more scores; and

providing a report that includes the rank ordered list of the one or more assessment results; and

a client computer, comprising:

a transceiver that communicates over the network;

a memory that stores at least instructions; and

one or more processors that execute instructions that perform actions, including:

receiving the report.

14. The system of Claim 13, wherein generating the one or more assessment results, further comprises:

generating one or more natural language narratives that describe one or more characteristics of the mark-of-interest based on its assessment and one or more narrative templates; and

including the one or more natural language narratives in the one or more assessment results.

15. The system of Claim 13, wherein providing the report, further comprises, generating one or more other visualizations that are associated with one or more of the one or more assessment models, the one or more assessment results, or the mark-of-interest.

16. The system of Claim 13, wherein the one or more processors of the network computer execute instructions that perform actions, further comprising:

monitoring feedback information that is associated with the report;

providing one or more other scores based on the feedback information; and

employing the one or more other scores to determine one or more modifications to the one or more assessments results.

17. The system of Claim 13, wherein the one or more processors of the network computer execute instructions that perform actions, further comprising, filtering the one or more assessment results based on the one or more scores, wherein each assessment result associated with a score that is less than a defined threshold value is excluded from the report.

18. A network computer for managing user visualizations, comprising:

a transceiver that communicates over the network;

a memory that stores at least instructions; and

one or more processors that execute instructions that perform actions, including:

providing one or more visualizations based on data from a data source, wherein the one or more visualizations include one or more marks that are associated with one or more values from the data source;

determining a mark-of-interest from the one or more marks based on one or more characteristics of the one or more marks and the one or more visualizations;

employing one or more assessment models to generate one or more assessment results for the one or more assessment models based on the mark-of-interest and the data from the data source, wherein each assessment result is associated with one or more scores that are based on a best fit to the data from the data source and a value of the mark-of-interest;

evaluating data associated with the mark-of-interest that is included in the data source and omitted from the visualization;

generating a portion of the one or more assessment results based on the evaluation;

rank ordering the one or more assessment results based on their association with the one or more scores; and

providing a report that includes the rank ordered list of the one or more assessment results.