

CLAIMS

What is claimed is:

1. A method comprising:

importing asset data from a memory of a computer, representing financial assets for any of accounts in which one or more of the assets are held, individuals who own one or more of the assets, or legal entities who own one or more of the assets;

retrieving report metadata and formatting attributes, wherein the report metadata comprises one or more of contexts, bucketing factors and column factors, and wherein the formatting attributes comprise one or more of report formatting attributes, page formatting attributes, and widget formatting attributes;

selecting display data from the asset data based on the report metadata, wherein the selecting the display data preserves the asset data unchanged in the memory of the computer;

applying one or more formats from the formatting attributes to the display data, wherein the applying preserves the asset data unchanged in the memory of the computer and results in formatted data;

displaying the formatted data on a graphical user interface;

wherein the method is performed by one or more computing devices.

2. The method of claim 1 wherein the selecting the display data from the asset data further comprises:

creating and storing, in the memory of the computer, a graph having nodes and edges, wherein the nodes represent the financial assets and anyone or more of: the accounts in which one or more of the assets are held; the individuals who own one or more of the assets; or legal entities who own one or more of the assets;

the computer traversing the graph and creating a list of a plurality of paths of nodes and edges in the graph;

the computer applying the bucketing factors to the paths to result in associating each set among a plurality of sets of the nodes with a different value node among a plurality of value nodes;

the computer applying the column factors to the paths and the value nodes to result in associating column result values with the value nodes;

selecting the display data of the value nodes and the column result values from the asset data.

3. The method of claim 1 further comprising displaying the formatted data in at least one page of a plurality of pages in a report, and wherein the report comprises the pages, the report metadata, and the formatting attributes.

4. The method of claim 1 further comprising:
receiving a request to generate a report;
in response to receiving the request, displaying a report selection dialog that enumerates a plurality of reports, wherein each report in the plurality of reports has a plurality of pages associated with the report;
receiving a selection of the report from the report selection dialog;
receiving a selection of a particular page of the plurality of pages associated with the report;
in response to receiving the selection, displaying the formatted data in the page.

5. The method of claim 3 further comprising:
displaying the formatted data in a plurality of widgets in the page, wherein the formatted data in a particular widget in the plurality of widgets is displayed in a widget format described by widget formatting attributes of the particular widget, wherein the widget formatting attributes are controlled by a plurality of widget controls;

displaying the plurality of widget controls for the particular widget;
receiving a modification to a widget control of the plurality of widget controls;
in response to receiving the modification, modifying the widget formatting attributes of the particular widget, wherein the modifying of the widget formatting attributes preserves the asset data associated with the formatted data unchanged in the memory of the computer;
causing re-displaying the formatted data in the particular widget in a different format described by the modified widget formatting attributes.

6. The method of claim 5 wherein the particular widget is a text widget, and wherein the displaying the formatted data further comprises displaying textual representations of a plurality of symbolic links, wherein each symbolic link identifies an entry in the asset data of the display data for a particular context.

7. The method of claim 6 wherein the entry in the asset data of the display data corresponds to a column factor for the particular context.

8. The method of claim 7 further comprising:
receiving a selection of a particular symbolic link in the text widget;
in response to receiving the selection of the particular symbolic link, displaying in the graphical user interface a column factor selection dialog box, wherein the column factor selection dialog box enumerates a plurality of column factors for the particular context;
receiving a column factor from the plurality of column factors; and
in response to receiving the column factor, causing re-displaying the textual representations for the particular symbolic link pointing to a different entry in the asset data of the formatted data corresponding to the column factor for the particular context in the text widget.

9. The method of claim 5 wherein the particular widget is a table widget and wherein the displaying the formatted data further comprises displaying a table view by forming rows based on the bucketing factors and forming columns based on the column factors for a particular context.

10. The method of claim 9 further comprising:
receiving a selection of a graphical element for column properties in the table view;
in response to receiving the selection, displaying in the graphical user interface a column formatting dialog box;
displaying a column widget control for a column in the column formatting dialog box, wherein the column widget control is a widget control from the plurality of widget controls for the table widget;
receiving a modification to the column widget control;
in response to receiving the modification, modifying the widget formatting attributes for the table widget, wherein the modifying of the widget formatting attributes preserves the asset data of the formatted data unchanged in the memory of the computer;
causing re-displaying the formatted data in the table view in the table widget in a different format described by the modified widget formatting attributes.

11. The method of claim 5 further comprising:
receiving a label for the page containing the plurality of widgets;
associating the formatting attributes of the plurality of widgets and of the page with the label;
storing in the memory of the computer the formatting attributes associated with the label.

12. The method of claim 5 further comprising:

displaying the formatted data in the page in a format described by the page formatting attributes, wherein the page formatting attributes are controlled by a plurality of page controls;
displaying the plurality of page controls for the page;
receiving a modification to a page control from the plurality of page controls;
in response to receiving the modification, modifying the page formatting attributes, wherein the modifying of the page formatting attributes preserves the asset data of the formatted data unchanged in the memory of the computer;
causing re-displaying the formatted data in the page based on the modified page formatting attributes.

13. The method of claim 5 further comprising:
receiving a request to split the page based on a split factor of a bucketing factor or a column factor, wherein a plurality of values are associated with the split factor;
selecting display data sets from the asset data based on the report metadata and the factor, wherein each display data in the display data set has a different value from the plurality of values associated with the split factor;
for each of the display data, creating a new page;
applying the formatting attributes to the new page.

14. The method of claim 5 further comprising:
displaying the formatted data in the page in a format described by the report formatting attributes, wherein the report formatting attributes are controlled by a plurality of report controls;
displaying the plurality of report controls for the plurality of pages;
receiving a modification to a report control from the plurality of report controls;
in response to receiving the modification, modifying the report formatting attributes for the plurality of pages, wherein the modifying of the report formatting attributes preserves the asset data of the formatted data unchanged in the memory of the computer;

causing re-displaying the formatted data in the page in a different format described in the modified report formatting attributes.

15. A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in any one of Claims 1-14.

CLAIMS

1. A method comprising:

importing asset data from a memory of a computer, representing financial assets for any of accounts in which one or more of the assets are held, individuals who own one or more of the assets, or legal entities who own one or more of the assets;

retrieving report metadata and formatting attributes, wherein the report metadata comprises one or more of contexts, bucketing factors and column factors, and wherein the formatting attributes comprise one or more of report formatting attributes, page formatting attributes, and widget formatting attributes;

selecting display data from the asset data based on the report metadata, wherein the selecting the display data preserves the asset data unchanged in the memory of the computer, wherein the selecting the display data from the asset data further comprises:

creating and storing, in the memory of the computer, a graph having nodes and edges, wherein the nodes represent the financial assets and anyone or more of: the accounts in which one or more of the assets are held; the individuals who own one or more of the assets; or legal entities who own one or more of the assets, wherein the graph includes at least one circular path comprising at least two of the edges and in which the at least one circular path originates at a particular node and connects back to that particular node;

the computer traversing the graph and creating a list of a plurality of paths of nodes and edges in the graph;

determining, during the traversing, whether two sequences of two or more traversed nodes are identical, and if so, backtracking the traversal and moving to a next adjacent path;

the computer applying the bucketing factors to the paths to result in associating each set among a plurality of sets of the nodes with a different value node among a plurality of value nodes;

the computer applying the column factors to the paths and the value nodes to result in associating column result values with the value nodes; and

selecting the display data of the value nodes and the column result values from the asset data;

applying one or more formats from the formatting attributes to the display data, wherein the applying preserves the asset data unchanged in the memory of the computer and results in formatted data; and

displaying the formatted data on a graphical user interface,

wherein the method is performed by one or more computing devices.

2. The method of claim 1 further comprising displaying the formatted data in at least one page of a plurality of pages in a report, and wherein the report comprises the pages, the report metadata, and the formatting attributes.

3. The method of claim 1 further comprising:

receiving a request to generate a report;

in response to receiving the request, displaying a report selection dialog that enumerates a plurality of reports, wherein each report in the plurality of reports has a plurality of pages associated with the report;

receiving a selection of the report from the report selection dialog;

receiving a selection of a particular page of the plurality of pages associated with the report;

and

in response to receiving the selection, displaying the formatted data in the page.

4. The method of claim 2 further comprising:

displaying the formatted data in a plurality of widgets in the page, wherein the formatted data in a particular widget in the plurality of widgets is displayed in a widget format described by

widget formatting attributes of the particular widget, wherein the widget formatting attributes are controlled by a plurality of widget controls;

displaying the plurality of widget controls for the particular widget;

receiving a modification to a widget control of the plurality of widget controls;

in response to receiving the modification, modifying the widget formatting attributes of the particular widget, wherein the modifying of the widget formatting attributes preserves the asset data associated with the formatted data unchanged in the memory of the computer; and

causing re-displaying the formatted data in the particular widget in a different format described by the modified widget formatting attributes.

5. The method of claim 4 wherein the particular widget is a text widget, and wherein the displaying the formatted data further comprises displaying textual representations of a plurality of symbolic links, wherein each symbolic link identifies an entry in the asset data of the display data for a particular context.

6. The method of claim 5 wherein the entry in the asset data of the display data corresponds to a column factor for the particular context.

7. The method of claim 6 further comprising:

receiving a selection of a particular symbolic link in the text widget;

in response to receiving the selection of the particular symbolic link, displaying in the graphical user interface a column factor selection dialog box, wherein the column factor selection dialog box enumerates a plurality of column factors for the particular context;

receiving a column factor from the plurality of column factors; and

in response to receiving the column factor, causing re-displaying the textual representations for the particular symbolic link pointing to a different entry in the asset data of the formatted data corresponding to the column factor for the particular context in the text widget.

8. The method of claim 4 wherein the particular widget is a table widget and wherein the displaying the formatted data further comprises displaying a table view by forming rows based on the bucketing factors and forming columns based on the column factors for a particular context.

9. The method of claim 8 further comprising:
receiving a selection of a graphical element for column properties in the table view;
in response to receiving the selection, displaying in the graphical user interface a column formatting dialog box;
displaying a column widget control for a column in the column formatting dialog box, wherein the column widget control is a widget control from the plurality of widget controls for the table widget;
receiving a modification to the column widget control;
in response to receiving the modification, modifying the widget formatting attributes for the table widget, wherein the modifying of the widget formatting attributes preserves the asset data of the formatted data unchanged in the memory of the computer; and
causing re-displaying the formatted data in the table view in the table widget in a different format described by the modified widget formatting attributes.

10. The method of claim 4 further comprising:
receiving a label for the page containing the plurality of widgets;
associating the formatting attributes of the plurality of widgets and of the page with the label;
and
storing in the memory of the computer the formatting attributes associated with the label.

11. The method of claim 4 further comprising:
displaying the formatted data in the page in a format described by the page formatting attributes, wherein the page formatting attributes are controlled by a plurality of page controls;

displaying the plurality of page controls for the page;
receiving a modification to a page control from the plurality of page controls;
in response to receiving the modification, modifying the page formatting attributes, wherein the modifying of the page formatting attributes preserves the asset data of the formatted data unchanged in the memory of the computer; and
causing re-displaying the formatted data in the page based on the modified page formatting attributes.

12. The method of claim 4 further comprising:
receiving a request to split the page based on a split factor of a bucketing factor or a column factor, wherein a plurality of values are associated with the split factor;
selecting display data sets from the asset data based on the report metadata and the factor, wherein each display data in the display data set has a different value from the plurality of values associated with the split factor;
for each of the display data, creating a new page; and
applying the formatting attributes to the new page.

13. The method of claim 4 further comprising:
displaying the formatted data in the page in a format described by the report formatting attributes, wherein the report formatting attributes are controlled by a plurality of report controls;
displaying the plurality of report controls for the plurality of pages;
receiving a modification to a report control from the plurality of report controls;
in response to receiving the modification, modifying the report formatting attributes for the plurality of pages, wherein the modifying of the report formatting attributes preserves the asset data of the formatted data unchanged in the memory of the computer; and
causing re-displaying the formatted data in the page in a different format described in the modified report formatting attributes.

14. A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in any one of Claims 1-13.