WHAT IS CLAIMED IS:

1. A method implemented by a metadata management system for using a metadata model to identify which one or more operations to execute in processing one or more data items, with the metadata model including one or more parent nodes and one or more child nodes, with the one or more operations being defined with respect to one or more parent nodes in the metadata model and applied to data represented by one or more child nodes in the metadata model, with the one or more parent nodes specifying logical metadata and with the one or more child nodes specifying physical metadata representing the one or more data items, the method including:

accessing, from memory by one or more processors, a given data item and physical metadata of that given data item;

accessing, from memory, a metadata model including nodes and specifying one or more relationships among at least two of the nodes;

accessing, from memory by one or more processors, a child node of the metadata model, the child node associated with the physical metadata of the given data item;

based on the one or more relationships, accessing, from memory by one or more processors, one or more parent nodes of the child node, with the one or more parent nodes specifying logical metadata including information relating to the physical metadata of the child node;

accessing, from memory by one or more processors and from the logical metadata including the information relating to the physical metadata of the child node and associated with the one or more parent nodes identified, data specifying one or more operations to be performed on the given data item; and

storing, in memory, a transformed data item generated by applying the one or more operations specified by the data to one or more values of a field of the given data item or to one or more fields of the given data item to transform the given data item, wherein the transformed data item is accessible for retrieval.

2. The method of claim 1, further including identifying the child node representing the physical metadata of the given data item by matching the physical metadata of the given data item to physical metadata represented by the child node in the metadata model.

3. The method of claim 1, further including accessing one or more metadata transforms to determine the one or more operations to be performed on the given data item, each metadata transform specifying at least one operation to be performed on data and at least one condition for performing the at least one operation.

4. The method of claim 3, further including determining the one or more operations to be performed on the given data item by:

selecting a metadata transform from the one or more metadata transforms;

determining whether the logical metadata associated with the one or more parent nodes satisfies the at least one condition of the selected metadata transform; and

in response to determining that the logical metadata associated with the one or more parent nodes satisfies the at least one condition of the selected metadata transform, determining that the one or more operations to be performed on the given data item includes the at least one operation specified by the selected metadata transform.

5. The method of claim 1, further including identifying the given data item by identifying the given data item that is accessed according to a processing specification, and further including applying the one or more operations to the given data item by:

inserting the data specifying the one or more operations into the processing specification; and

executing the processing specification to apply the one or more operations to the given data item.

6. The method of claim 5, wherein the processing specification includes a specification for a dataflow graph, and wherein the applying the one or more operations to the given data item includes executing the dataflow graph, with the executing dataflow graph applying the one or more operations to the given data item.

7. The method of claim 1, further including updating the metadata model based on the transformed data item.

8. The method of claim 7, wherein updating the metadata model includes adding one or more edges to existing nodes in the metadata model to connect the existing nodes in the metadata model to added nodes.

9. The method of claim 7, further including:

identifying physical metadata of the transformed data item;

identifying, in the updated metadata model, a child node representing the physical metadata of the transformed data item;

traversing one or more edges in the updated metadata model to identify one or more parent nodes of the child node that represents the physical metadata of the transformed data item; and

determining, from logical metadata associated with the one or more parent nodes identified by traversing the one or more edges in the updated metadata model, that the one or more operations performed on the given data item are not to be performed on the transformed data item.

10. The method of claim 9, further including determining that the one or more operations performed on the given data item are not to be performed on the transformed data item includes determining that the logical metadata associated with the one or more parent nodes identified by traversing the one or more edges in the updated metadata model is different from the logical metadata associated with the one or more parent nodes identified by traversing the one or more edges in the metadata model.

11. The method of claim 7, wherein updating the metadata model includes adding one or more nodes to the metadata model, the added one or more nodes representing metadata for the transformed data item.

12. The method of claim 11, wherein some of the added one or more nodes are replications of some of the nodes that were already existing in the metadata model before the updating.

13. The method of claim 12, further including outputting the updated metadata model for further processing of a data item.

14. The method of claim 12, further including:

identifying physical metadata of the transformed data item;

identifying, in the updated metadata model, a child node representing the physical metadata of the transformed data item;

traversing one or more edges in the updated metadata model to identify one or more parent nodes of the child node that represents the physical metadata of the transformed data item;

determining, from logical metadata associated with the one or more parent nodes identified by traversing the one or more edges in the updated metadata model, one or more second operations to be performed on the transformed data item;

applying, by the metadata management system, the one or more second operations to the transformed data item to further transform the transformed data item; and

storing, in memory, the further transformed data item.

15. The method of claim 1, further including applying the one or more operations to the given data item by dropping a data field associated with the data item from further processing by a computer program.

16. The method of claim 1, further including applying the one or more operations to the given data item by adding a data field to the data item or a dataset associated with the data item.

17. The method of claim 1, further including applying the one or more operations to the given data item by filtering a data record associated with the data item.

18. The method of claim 1, wherein the one or more operations to be performed on the given data item include a tokenization operation, and wherein the method further includes applying the tokenization operation to the given data item to tokenize one or more fields of the given data item.

19. The method of claim 1, wherein the logical metadata associated with the one or more parent nodes includes metadata received from a user by interaction with the metadata management system.

20. The method of claim 19, wherein the metadata received from the user is a personally identifiable information (PII) specification that was specified by the user through a graphical user interface, said graphical user interface including a visualization of the metadata model, and wherein the PII specification was specified by an interaction of the user with the visualization of the metadata model to select an item of metadata associated with one or more of the parent nodes for which the PII specification is to be specified in the model, and the method further including:

updating the metadata model after receiving the PII specification to associate the logical metadata with the one or more parent nodes, including indicating in the metadata model that the one or more of the parent nodes associated with the selected item of metadata are associated with the PII specification, wherein the one or more operations applied to the given data item to transform the given data item includes tokenizing one or more fields of the given data item.

21. The method of claim 1, further including:

accessing a plurality of data items stored in hardware storage;

for each data item of the plurality of data items, identifying physical metadata and logical metadata corresponding to the data item;

generating the metadata model based on the physical metadata and the logical metadata identified for each of the plurality of data items;

providing access to the metadata model for a first application and a second application;

accessing, by at least one of the first application or the second application, the metadata model, wherein each of the first application and the second application are configured to:

access the given data item to identify the physical metadata of that given data item;

identify, in the metadata model, the child node presenting the identified physical metadata of the given data item;

traverse one or more edges in the metadata model to identify the one or more parent nodes of the identified child node;

determine, from the logical metadata associated with the one or more parent nodes identified, at least one operation to be performed on the given data item;

apply the at least one operation to the given data item to transform the given data item; and

store the transformed data item.

22. The method of claim 1, wherein the metadata model includes a first data structure corresponding to the parent nodes, the data structure including the logical metadata and at least a first pointer and a second pointer, wherein the first pointer points to a second data structure corresponding to the child node that represents the physical metadata of the given data item, and the second pointer points to a third data structure corresponding to another child node that represents physical metadata of another data item different from the given data item.

23. The method of claim 1, further including:

causing rendering of one or more visualizations of the transformed data item on a display of a display device.

24. A system including:

at least one processor; and

memory storing instructions executable by the at least one processor to perform the steps of the method of any one of claims 1 to 23.

25. A non-transitory computer readable medium storing instructions executable by at least one processor to perform the steps of the method of any one of claims 1 to 23.