

CLAIMS

What is claimed is:

1. A method comprising:

obtaining a first at least one dataset that includes:

5 information corresponding to a periods of usage of a plurality of components within a cloud infrastructure and information corresponding to usage cost for each component of a the plurality of components within the a cloud infrastructure; and

comparing the information corresponding to the periods of usage of the components within the cloud infrastructure with at least a portion of the information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

10 determining a cost for one or more of the components within the cloud infrastructure for a period of time based on the comparison of the information corresponding to the periods of usage of the components within the cloud infrastructure with at least the portion of the information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

15 generating a visualization that comprises a plurality of objects and information representative of the cost of one or more of the components within the cloud infrastructure for the period of time; and

displaying, via a display screen, the visualization

20 metadata corresponding to information describing a functionality of one or more components of the plurality of components within the cloud infrastructure;

determining an actual usage of the plurality of components during a first period of time within the cloud infrastructure;

obtaining a second dataset that includes:

25 information corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure; and

information corresponding to an estimated usage of the plurality of components during a second period of time within the cloud infrastructure;

30 performing a first comparison that includes comparing the information of the second dataset corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure with at least a portion of the information of the first dataset corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

performing a second comparison that includes comparing the information of the second dataset corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure with at least a portion of the metadata of the first dataset corresponding to information describing the functionality of one or more components of the plurality of components within the cloud infrastructure;

performing a third comparison that includes comparing the information of the second dataset corresponding to the estimated usage of the plurality of components during the second period of time within the cloud infrastructure with at least the portion of the information of the first dataset corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

determining an overall cost for one or more components of the plurality of components during the first period of time within the cloud infrastructure based on the first comparison;

determining for what purpose one or more components of the plurality of components during the first period of time within the cloud infrastructure was used for based on the second comparison;

determining a future cost for one or more components of the plurality of components during the second period of time within the cloud infrastructure based on the third comparison;

generating a visualization within a graphical user interface (GUI) that comprises:
a plurality of objects and information representative of the overall cost for one or more components of the plurality of components during the first period of time within the cloud infrastructure;

the future cost for one or more components of the plurality of components during the second period of time within the cloud infrastructure; and

for what purpose one or more components of the plurality of components during the first period of time within the cloud infrastructure was used for; and

displaying, via a display screen, the visualization within the GUI to allow a user to interact with the visualization within the GUI.

~~2. The method of claim 1, wherein obtaining at least one dataset includes:~~

~~obtaining a first dataset comprising information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure; and~~

~~obtaining a second dataset comprising information corresponding to the one or more periods of usage of the plurality of components within the cloud infrastructure.~~

3. ~~The method of claim 2, wherein the first dataset is obtained from a cloud service provider and the second dataset is obtained from a user and the cost for one or more of the components within the cloud infrastructure for the period of time is determined as an estimated usage cost of one or more of the components within the cloud infrastructure.~~

4. ~~The method of claim 2, wherein the first dataset is obtained from a cloud service provider and the second dataset is obtained from a user and the cost for one or more of the components within the cloud infrastructure for the period of time is determined as an estimated usage cost of one or more of the components within the cloud infrastructure.~~

52. The method of claim 1, further comprising:

receiving, via the GUI being a user interface displayed via the display screen, a user input effective to indicate at least one object of the plurality of objects is to be altered; and
altering the visualization within the GUI being displayed via the display screen based on the user input.

36. The method of claim 1, further comprising:

receiving, via the GUI being a user interface displayed via the display screen, a user input effective to select portions of the at least one dataset to be included in the visualization within the GUI being displayed via the display screen; and
filtering at least a portion of the at least one dataset, wherein the visualization within the GUI being displayed via the display screen is generated to only include costs corresponding to the selected portions of the at least one dataset.

47. The method of claim 1, further comprising:

receiving, via the GUI being a user interface displayed via the display screen, a user input effective to select a function to be performed using only information that is included in one or more objects within the visualization within the GUI being displayed via the display screen; and

performing the selected function using only the information that is included in the one or more objects within the visualization within the GUI being displayed via the display screen.

58. A non-transitory computer-readable hardware storage medium having computer-executable instructions stored thereon that are executable by a processor device to perform or control performance of operations comprising:

obtaining a first at least one dataset that includes:

5 information corresponding to ~~a periods of usage of a plurality of components within a cloud infrastructure and information corresponding to~~ usage cost for each component of ~~at~~ the plurality of components within ~~at~~ the cloud infrastructure; and

metadata corresponding to information describing a functionality of one or more components of the plurality of components within the cloud infrastructure;

10 determining an actual usage of the plurality of components during a first period of time within the cloud infrastructure;

obtaining a second dataset that includes:

information corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure; and

15 information corresponding to an estimated usage of the plurality of components during a second period of time within the cloud infrastructure;

performing a first comparison that includes comparing the information of the second dataset corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure with at least a portion of the information of
20 the first dataset corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

performing a second comparison that includes comparing the information of the second dataset corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure with at least a portion of the metadata of the
25 first dataset corresponding to information describing the functionality of one or more components of the plurality of components within the cloud infrastructure;

performing a third comparison that includes comparing the information of the second dataset corresponding to the estimated usage of the plurality of components during the second period of time within the cloud infrastructure with at least the portion of the information of the
30 first dataset corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

determining an overall cost for one or more components of the plurality of components during the first period of time within the cloud infrastructure based on the first comparison;

determining for what purpose one or more components of the plurality of components during the first period of time within the cloud infrastructure was used for based on the second comparison;

determining a future cost for one or more components of the plurality of components during the second period of time within the cloud infrastructure based on the third comparison;

generating a visualization within a graphical user interface (GUI) that comprises:

a plurality of objects and information representative of the overall cost for one or more components of the plurality of components during the first period of time within the cloud infrastructure;

the future cost for one or more components of the plurality of components during the second period of time within the cloud infrastructure; and

for what purpose one or more components of the plurality of components during the first period of time within the cloud infrastructure was used for; and

displaying, via a display screen, the visualization within the GUI to allow a user to interact with the visualization within the GUI

~~comparing the information corresponding to the periods of usage of the components within the cloud infrastructure with at least a portion of the information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;~~

~~determining a cost for one or more of the components within the cloud infrastructure for a period of time based on the comparison of the information corresponding to the periods of usage of the components within the cloud infrastructure with at least the portion of the information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;~~

~~generating a visualization that comprises a plurality of objects and information representative of the cost of one or more of the components within the cloud infrastructure for the period of time; and~~

~~displaying, via a display screen, the visualization.~~

~~9. The non-transitory computer-readable storage medium of claim 8, wherein the operation obtain at least one dataset comprises:~~

~~obtaining a first dataset comprising information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure; and~~

~~obtaining a second dataset comprising information corresponding to the one or more periods of usage of the plurality of components within the cloud infrastructure.~~

10. ~~The non-transitory computer-readable storage medium of claim 9, wherein the first dataset is obtained from a cloud service provider and the second dataset is obtained from a user and the cost for one or more of the components within the cloud infrastructure for the period of time is determined as an estimated usage cost of one or more of the components within the cloud infrastructure.~~

11. ~~The non-transitory computer-readable storage medium of claim 9, wherein the first dataset is obtained from a cloud service provider and the second dataset is obtained from a user and the cost for one or more of the components within the cloud infrastructure for the period of time is determined as an actual usage cost of one or more of the components within the cloud infrastructure.~~

612. The non-transitory computer-readable hardware storage medium of claim 58, the operations further comprising:

receiving, via the GUI being ~~a user interface~~ displayed via the display screen, a user input effective to indicate at least one object of the plurality of objects is to be altered; and
altering the visualization within the GUI being displayed via the display screen based on the user input.

713. The non-transitory computer-readable hardware storage medium of claim 58, the operations further comprising:

receiving, via the GUI being ~~a user interface~~ displayed via the display screen, a user input effective to select portions of the at least one dataset to be included in the visualization within the GUI being displayed via the display screen; and

filtering at least a portion of the at least one dataset, wherein the visualization within the GUI being displayed via the display screen is generated to only include costs corresponding to the selected portions of the at least one dataset.

814. The non-transitory computer-readable hardware storage medium of claim 58, the operations further comprising:

receiving, via the GUI being ~~a user interface~~ displayed via the display screen, a user input effective to select a function to be performed using only information that is included in

one or more objects within the visualization within the GUI being displayed via the display screen; and

performing the selected function using only the information that is included in the one or more objects within the visualization within the GUI being displayed via the display screen.

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915. A system comprising:

a processor configured to cause performance of operations comprising:

obtaining a first dataset that includes:

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~~at least one dataset that includes information corresponding to a periods of usage of a plurality of components within a cloud infrastructure and information corresponding to usage cost for each component of a the plurality of components within the cloud infrastructure; and~~

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~~comparing the information corresponding to the periods of usage of the components within the cloud infrastructure with at least a portion of the information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;~~

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~~determining a cost for one or more of the components within the cloud infrastructure for a period of time based on the comparison of the information corresponding to the periods of usage of the components within the cloud infrastructure with at least the portion of the information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;~~

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~~generating a visualization that comprises a plurality of objects and information representative of the cost of one or more of the components within the cloud infrastructure for the period of time; and~~

~~displaying, via a display screen, the visualization.~~

metadata corresponding to information describing a functionality of one or more components of the plurality of components within the cloud infrastructure;

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determining an actual usage of the plurality of components during a first period of time within the cloud infrastructure;

obtaining a second dataset that includes:

information corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure; and

information corresponding to an estimated usage of the plurality of components during a second period of time within the cloud infrastructure;

performing a first comparison that includes comparing the information of the second dataset corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure with at least a portion of the information of the first dataset corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

performing a second comparison that includes comparing the information of the second dataset corresponding to the determined actual usage of the plurality of components during the first period of time within the cloud infrastructure with at least a portion of the metadata of the first dataset corresponding to information describing the functionality of one or more components of the plurality of components within the cloud infrastructure;

performing a third comparison that includes comparing the information of the second dataset corresponding to the estimated usage of the plurality of components during the second period of time within the cloud infrastructure with at least the portion of the information of the first dataset corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure;

determining an overall cost for one or more components of the plurality of components during the first period of time within the cloud infrastructure based on the first comparison;

determining for what purpose one or more components of the plurality of components during the first period of time within the cloud infrastructure was used for based on the second comparison;

determining a future cost for one or more components of the plurality of components during the second period of time within the cloud infrastructure based on the third comparison;

generating a visualization within a graphical user interface (GUI) that comprises:

a plurality of objects and information representative of the overall cost for one or more components of the plurality of components during the first period of time within the cloud infrastructure;

the future cost for one or more components of the plurality of components during the second period of time within the cloud infrastructure; and

for what purpose one or more components of the plurality of components during the first period of time within the cloud infrastructure was used for; and
displaying, via a display screen, the visualization within the GUI to allow a user to interact with the visualization within the GUI.

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~~16. The system of claim 15, wherein the operation obtain at least one dataset comprises:
obtaining a first dataset comprising information corresponding to the usage cost for each component of the plurality of components within the cloud infrastructure; and
obtaining a second dataset comprising information corresponding to the one or more periods of usage of the plurality of components within the cloud infrastructure.~~

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~~17. The system of claim 16, wherein the first dataset is obtained from a cloud service provider and the second dataset is obtained from a user and the cost for one or more of the components within the cloud infrastructure for the period of time is determined as an estimated usage cost of one or more of the components within the cloud infrastructure.~~

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~~18. The system of claim 16, wherein the first dataset is obtained from a cloud service provider and the second dataset is obtained from a user and the cost for one or more of the components within the cloud infrastructure for the period of time is determined as an actual usage cost of one or more of the components within the cloud infrastructure.~~

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~~1019.~~ The system of claim ~~945~~, the operations further comprising:

receiving, via ~~the GUI being a user interface~~ displayed via the display screen, ~~a user~~ input effective to indicate at least one object of the plurality of objects is to be altered; and

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altering the visualization within the GUI being displayed via the display screen based on the user input.

~~1120.~~ The system of claim ~~945~~, the operations further comprising:

receiving, via ~~the GUI being a user interface~~ displayed via the display screen, ~~a user~~ input effective to select portions of the at least one dataset to be included in the visualization within the GUI being displayed via the display screen; and

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filtering at least a portion of the at least one dataset, wherein the visualization within the GUI being displayed via the display screen is generated to only include costs corresponding to the selected portions of the at least one dataset.