

[0005] However, in order to develop a reader's understanding of the innovations, disclosures have been compiled into a single description to illustrate and clarify how aspects of these innovations operate independently, interoperate as between individual innovations, and/or cooperate collectively. The application goes on to further describe the interrelations and synergies as between the various innovations; all of which is to further compliance with 35 U.S.C. §112.

BACKGROUND

[0006] Many people share information through online social media streams using various communication devices or applications. Moreover, consumers may access online stores using the Internet on a computer or mobile device to make purchases from various service providers or merchants.

SUMMARY

[0006a] According to an aspect, there is provided a centralized personal information platform processor-implemented method for enhancing transaction speed through the reduction of user input data transfer requirements, comprising: aggregating data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data; identifying data field types within the data records and their associated data values; identifying an entity from the data field types and their associated data values; generating, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template; associating, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values; generating an updated profile and social graph of the entity using the generated correlations and associated attributes; and providing the updated profile and social graph for an automated web form filling request.

[0006b] ~~According to another aspect, there is provided~~ disclosed a merchant analytics platform processor-implemented method for reduced transaction wait processing requirements through the use of customized transaction parameters based on a distributed linking node mesh, comprising: obtaining a request for a merchant analytics report including a user identification; aggregating user data of the user in a centralized personal information database; retrieving the aggregated user data in response to obtaining the request for the merchant analytics report; generating a user behavior profile using an analytical model, based on the aggregated user data retrieved from the centralized personal information database; providing the user behavior profile as part of the merchant analytics report.

[0006c] ~~According to another aspect, there is provided~~ disclosed an analytical model sharing processor-implemented method for privacy enhanced analytical model sharing through the use of contextual privacy dataset modifications, comprising: obtaining a request to publish an analytical model operating on user data retrieved from a centralized personal information database; determining whether the analytical model includes a model dataset; upon determining that the analytical model includes a model dataset, determining whether the model dataset includes personally identifiable information; and generating a determination of whether to accept the request to publish the analytical model based on whether the model dataset includes personally identifiable information.

[0006d] ~~According to another aspect, there is provided~~ disclosed an encryptmatics extensible markup language data conversion processor-implemented method for increased efficiency in contextless user model sharing through the use of intermediary meta-language processing, comprising: receiving an input model containing non-meta-data based language commands; retrieving input language definition records corresponding to the input model language commands; retrieving meta-data based language definition records; and generating a meta-data based language command file using the input language definition records and the meta-based language definition records.

[0006e] ~~According to another aspect, there is provided~~ disclosed a processor-implemented method, comprising: aggregating, from a plurality of entities, raw mesh entries comprising any of: emails, engagement transactions, financial transactions, social media entries, into memory; determining an mesh entry type for each raw mesh entry; placing contents of each raw mesh entry into an unprocessed mesh entry structure; setting the mesh entry type for the unprocessed mesh entry from the determined mesh entry type; generating a

dictionary hash entry from the raw mesh entry and saving it into the unprocessed mesh entry structure; updating a mesh entry dictionary with the unprocessed mesh entry structure; replicating the mesh entry dictionary to another location without the raw mesh entry in the mesh entry structure, wherein the replicated mesh entry dictionary is actionable for analysis without the raw mesh entry and with the dictionary has entry and set mesh entry type; storing the unprocessed mesh entry structure into a multi-directionally linked multimedia data mesh (MLMD mesh); determining correlations within the unprocessed mesh entry structure with other stored mesh entry structures in the MLMD mesh; creating links to the determined correlated stored mesh entry structures and storing them in the stored unprocessed mesh entry structure; marking the unprocessed mesh entry structure as a processed mesh entry structure.

[0006f] According to another aspect, there is provided a centralized personal information platform processor-implemented system for enhancing transaction speed through the reduction of user input data transfer requirements, comprising: means to aggregate data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data; means to identify data field types within the data records and their associated data values; means to identify an entity from the data field types and their associated data values; means to generate, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template; means to associate, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values; means to generate an updated profile and social graph of the entity using the generated correlations and associated attributes; and means to provide the updated profile and social graph for an automated web form filling request.

[0006g] According to another aspect, ~~there is provided~~ disclosed a merchant analytics platform processor-implemented system for reduced transaction wait processing requirements through the use of customized transaction parameters based on a distributed linking node mesh, comprising: means to obtain a request for a merchant analytics report including a user

identification; means to aggregate user data of the user in a centralized personal information database; means to retrieve the aggregated user data in response to obtaining the request for the merchant analytics report; means to generate a user behavior profile using an analytical model, based on the aggregated user data retrieved from the centralized personal information database; means to provide the user behavior profile as part of the merchant analytics report.

[0006h] ~~According to another aspect, there is provided~~ disclosed an analytical model sharing processor-implemented system for privacy enhanced analytical model sharing through the use of contextual privacy dataset modifications, comprising: means to obtain a request to publish an analytical model operating on user data retrieved from a centralized personal information database; means to determine whether the analytical model includes a model dataset; means to upon determining that the analytical model includes a model dataset, determining whether the model dataset includes personally identifiable information; and means to generate a determination of whether to accept the request to publish the analytical model based on whether the model dataset includes personally identifiable information.

[0006i] ~~According to another aspect, there is provided~~ disclosed an encryptmatics extensible markup language data conversion processor-implemented system for increased efficiency in contextless user model sharing through the use of intermediary meta-language processing, comprising: means to receive an input model containing non-meta-data based language commands; means to retrieve input language definition records corresponding to the input model language commands; means to retrieve meta-data based language definition records; and means to generate a meta-data based language command file using the input language definition records and the meta-based language definition records.

[0006j] ~~According to another aspect, there is provided~~ disclosed an processor-implemented system, comprising: means to aggregate, from a plurality of entities, raw mesh entries comprising any of: emails, engagement transactions, financial transactions, social media entries, into memory; means to determine an mesh entry type for each raw mesh entry; means to place contents of each raw mesh entry into an unprocessed mesh entry structure; means to set the mesh entry type for the unprocessed mesh entry from the determined mesh entry type; means to generate a dictionary hash entry from the raw mesh entry and saving it into the unprocessed mesh entry structure; means to update a mesh entry dictionary with the unprocessed mesh entry structure; means to replicate the mesh entry dictionary to another location without the raw mesh entry in the mesh entry structure, wherein the replicated mesh

entry dictionary is actionable for analysis without the raw mesh entry and with the dictionary has entry and set mesh entry type; means to store the unprocessed mesh entry structure into a multi-directionally linked multimedia data mesh (MLMD mesh); means to determine correlations within the unprocessed mesh entry structure with other stored mesh entry structures in the MLMD mesh; means to create links to the determined correlated stored mesh entry structures and storing them in the stored unprocessed mesh entry structure; means to mark the unprocessed mesh entry structure as a processed mesh entry structure.

[0006k] According to another aspect, there is provided a centralized personal information platform processor-implemented apparatus for enhancing transaction speed through the reduction of user input data transfer requirements, comprising: a memory; a processor disposed in communication with said memory, and configured to issue a plurality of processing instructions stored in the memory, wherein the processor issues instructions to: aggregate data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data; identify data field types within the data records and their associated data values; identify an entity from the data field types and their associated data values; generate, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template; associate, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values; generate an updated profile and social graph of the entity using the generated correlations and associated attributes; and provide the updated profile and social graph for an automated web form filling request.

[0006l] ~~According to another aspect, there is provided~~ disclosed a merchant analytics platform processor-implemented apparatus for reduced transaction wait processing requirements through the use of customized transaction parameters based on a distributed linking node mesh, comprising: a memory; a processor disposed in communication with said memory, and configured to issue a plurality of processing instructions stored in the memory, wherein the processor issues instructions to: obtain ~~in~~ a request for a merchant analytics report

including a user identification; aggregate user data of the user in a centralized personal information database; retrieve the aggregated user data in response to obtaining the request for the merchant analytics report; generate a user behavior profile using an analytical model, based on the aggregated user data retrieved from the centralized personal information database; provide the user behavior profile as part of the merchant analytics report.

[0006m] ~~According to another aspect,~~ There is provided-disclosed an analytical model sharing processor-implemented apparatus for privacy enhanced analytical model sharing through the use of contextual privacy dataset modifications, comprising: a memory; a processor disposed in communication with said memory, and configured to issue a plurality of processing instructions stored in the memory, wherein the processor issues instructions to: obtain a request to publish an analytical model operating on user data retrieved from a centralized personal information database; determine whether the analytical model includes a model dataset; upon determining that the analytical model includes a model dataset, determining whether the model dataset includes personally identifiable information; and generate a determination of whether to accept the request to publish the analytical model based on whether the model dataset includes personally identifiable information.

[0006n] ~~According to another aspect,~~ There is provided-disclosed an encryptmatics extensible markup language data conversion processor-implemented apparatus for increased efficiency in contextless user model sharing through the use of intermediary meta-language processing, comprising: a memory; a processor disposed in communication with said memory, and configured to issue a plurality of processing instructions stored in the memory, wherein the processor issues instructions to: receive an input model containing non-meta-data based language commands; retrieve input language definition records corresponding to the input model language commands; retrieve meta-data based language definition records; and generate a meta-data based language command file using the input language definition records and the meta-based language definition records.

[0006o] ~~According to another aspect,~~ There is provided-disclosed an processor-implemented apparatus, comprising: a memory; a processor disposed in communication with said memory, and configured to issue a plurality of processing instructions stored in the memory, wherein the processor issues instructions to: aggregate, from a plurality of entities, raw mesh entries comprising any of: emails, engagement transactions, financial transactions, social media entries, into memory; determine an mesh entry type for each raw mesh entry;

place contents of each raw mesh entry into an unprocessed mesh entry structure; set the mesh entry type for the unprocessed mesh entry from the determined mesh entry type; generate a dictionary hash entry from the raw mesh entry and saving it into the unprocessed mesh entry structure; update a mesh entry dictionary with the unprocessed mesh entry structure; replicate the mesh entry dictionary to another location without the raw mesh entry in the mesh entry structure, wherein the replicated mesh entry dictionary is actionable for analysis without the raw mesh entry and with the dictionary has entry and set mesh entry type; store the unprocessed mesh entry structure into a multi-directionally linked multimedia data mesh (MLMD mesh); determine correlations within the unprocessed mesh entry structure with other stored mesh entry structures in the MLMD mesh; create links to the determined correlated stored mesh entry structures and storing them in the stored unprocessed mesh entry structure; mark the unprocessed mesh entry structure as a processed mesh entry structure.

[0006p] According to another aspect, there is provided a non-transitory medium storing processor-issuable instructions for a centralized personal information platform processor-implemented to: aggregate data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data; identify data field types within the data records and their associated data values; identify an entity from the data field types and their associated data values; generate, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template; associate, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values; generate an updated profile and social graph of the entity using the generated correlations and associated attributes; and provide the updated profile and social graph for an automated web form filling request.

[0006q] ~~According to another aspect, there is provided disclosed~~ a merchant analytics platform processor-implemented medium storing instructions for reduced transaction wait processing requirements through the use of customized transaction parameters based on a

distributed linking node mesh to: obtain a request for a merchant analytics report including a user identification; aggregate user data of the user in a centralized personal information database; retrieve the aggregated user data in response to obtaining the request for the merchant analytics report; generate a user behavior profile using an analytical model, based on the aggregated user data retrieved from the centralized personal information database; provide the user behavior profile as part of the merchant analytics report.

[0006r] ~~According to another aspect, there is provided~~ disclosed an analytical model sharing processor-implemented medium for privacy enhanced analytical model sharing through the use of contextual privacy dataset modifications, comprising instructions to: obtain a request to publish an analytical model operating on user data retrieved from a centralized personal information database; determine whether the analytical model includes a model dataset; upon determining that the analytical model includes a model dataset, determining whether the model dataset includes personally identifiable information; and generate a determination of whether to accept the request to publish the analytical model based on whether the model dataset includes personally identifiable information.

[0006s] ~~According to another aspect, there is provided~~ disclosed an encryptmatics extensible markup language data conversion processor-implemented medium storing instructions for increased efficiency in contextless user model sharing through the use of intermediary meta-language processing to: receive an input model containing non-meta-data based language commands; retrieve input language definition records corresponding to the input model language commands; retrieve meta-data based language definition records; and generate a meta-data based language command file using the input language definition records and the meta-based language definition records.

[0006t] ~~According to another aspect, there is provided~~ disclosed an processor-implemented medium containing instructions to: aggregate, from a plurality of entities, raw mesh entries comprising any of: emails, engagement transactions, financial transactions, social media entries, into memory; determine an mesh entry type for each raw mesh entry; place contents of each raw mesh entry into an unprocessed mesh entry structure; set the mesh entry type for the unprocessed mesh entry from the determined mesh entry type; generate a dictionary hash entry from the raw mesh entry and saving it into the unprocessed mesh entry structure; update a mesh entry dictionary with the unprocessed mesh entry structure; replicate the mesh entry dictionary to another location without the raw mesh entry in the mesh entry

structure, wherein the replicated mesh entry dictionary is actionable for analysis without the raw mesh entry and with the dictionary has entry and set mesh entry type; store the unprocessed mesh entry structure into a multi-directionally linked multimedia data mesh (MLMD mesh); determine correlations within the unprocessed mesh entry structure with other stored mesh entry structures in the MLMD mesh; create links to the determined correlated stored mesh entry structures and storing them in the stored unprocessed mesh entry structure; mark the unprocessed mesh entry structure as a processed mesh entry structure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The accompanying appendices and/or drawings illustrate various non-limiting, example, innovative aspects in accordance with the present descriptions:

[0008] FIGURE 1 shows a block diagram illustrating example aspects of a centralized personal information platform in some embodiments of the MMCDB;

[0009] FIGURES 2A-F show block diagrams illustrating example aspects of data models within a centralized personal information platform in some embodiments of the MMCDB;

[0010] FIGURE 3 shows a block diagram illustrating example MMCDB component configurations in some embodiments of the MMCDB;

[0011] FIGURE 4 shows a data flow diagram illustrating an example search result aggregation procedure in some embodiments of the MMCDB;

[0012] FIGURE 5 shows a logic flow diagram illustrating example aspects of aggregating search results in some embodiments of the MMCDB, e.g., a Search Results Aggregation ("SRA") component 500;

CLAIMS

What is claimed is:

1. A centralized personal information platform processor-implemented method for enhancing transaction speed through the reduction of user input data transfer requirements, comprising:

aggregating data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data;

identifying data field types within the data records and their associated data values;

identifying an entity from the data field types and their associated data values;

generating, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template;

associating, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values;

generating an updated profile and social graph of the entity using the generated correlations and associated attributes; and

providing the updated profile and social graph for an automated web form filling request.

2. The method of claim 1, further comprising:

generating a search query using the updated profile; and

providing the generated search query for further data aggregation.

3. The method of claim 2, wherein the search query is a web search query.

4. The method of claim 2, wherein the search query is a social search query.
5. The method of claim 2, wherein the search query is an email data aggregation query.
6. The method of claim 4, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.
7. The method of claim 1, further comprising:
 - generating a search query using the updated social graph; and
 - providing the generated search query for further data aggregation.
8. The method of claim 6, wherein the search query is a web search query.
9. The method of claim 6, wherein the search query is a social search query.
10. The method of claim 8, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.
11. The method of claim 1, wherein the entity is one of: an Internet Protocol address; an individual; a pair of associated individuals; and a household; an office space; and an organization.
12. A centralized personal information platform processor-implemented system for enhancing transaction speed through the reduction of user input data transfer requirements, comprising:
 - means to aggregate data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data;
 - means to identify data field types within the data records and their associated data values;
 - means to identify an entity from the data field types and their associated data values;
 - means to generate, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template;

means to associate, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values;

means to generate an updated profile and social graph of the entity using the generated correlations and associated attributes; and

means to provide the updated profile and social graph for an automated web form filling request.

13. The system of claim 12, further comprising:

means to generate a search query using the updated profile; and

means to provide the generated search query for further data aggregation.

14. The system of claim 13, wherein the search query is a web search query.

15. The system of claim 13, wherein the search query is a social search query.

16. The system of claim 13, wherein the search query is an email data aggregation query.

17. The system of claim 15, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.

18. The system of claim 12, further comprising:

means to generate a search query using the updated social graph; and

means to provide the generated search query for further data aggregation.

19. The system of claim 17, wherein the search query is a web search query.

20. The system of claim 17, wherein the search query is a social search query.

21. The system of claim 19, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.

22. The system of claim 12, wherein the entity is one of: an Internet Protocol address; an individual; a pair of associated individuals; and a household; an office space; and an organization.

23. A centralized personal information platform processor-implemented apparatus for enhancing transaction speed through the reduction of user input data transfer requirements, comprising:

a memory;

a processor disposed in communication with said memory, and configured to issue a plurality of processing instructions stored in the memory, wherein the processor issues instructions to:

aggregate data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data;

identify data field types within the data records and their associated data values;

identify an entity from the data field types and their associated data values;

generate, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template;

associate, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values;

generate an updated profile and social graph of the entity using the generated correlations and associated attributes; and

provide the updated profile and social graph for an automated web form filling request.

24. The apparatus of claim 23, further comprising instructions to:

generate a search query using the updated profile; and

provide the generated search query for further data aggregation.

25. The apparatus of claim 24, wherein the search query is a web search query.

26. The apparatus of claim 24, wherein the search query is a social search query.

27. The apparatus of claim 24, wherein the search query is an email data aggregation query.

28. The apparatus of claim 26, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.

29. The apparatus of claim 23, further comprising instructions to:

generate a search query using the updated social graph; and

provide the generated search query for further data aggregation.

30. The apparatus of claim 28, wherein the search query is a web search query.

31. The apparatus of claim 28, wherein the search query is a social search query.

32. The apparatus of claim 30, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.

33. The apparatus of claim 23, wherein the entity is one of: an Internet Protocol address; an individual; a pair of associated individuals; and a household; an office space; and an organization.

34. A non-transitory medium storing processor-issuable instructions for a centralized personal information platform processor-implemented to:

aggregate data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data;

identify data field types within the data records and their associated data values;

identify an entity from the data field types and their associated data values;

generate, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values by comparing fields from a non-normalized transaction data record with fields extracted from a normalized transaction data record template and determining whether the field identifiers of fields in the non-normalized transaction data record match any of the normalized transaction data record template, based on the comparison, wherein a map is generated between fields of the non-normalized transaction data record and normalized transaction data record template;

associate, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values;

generate an updated profile and social graph of the entity using the generated correlations and associated attributes; and

provide the updated profile and social graph for an automated web form filling request.

35. The medium of claim 34, further comprising instructions to:

generate a search query using the updated profile; and

provide the generated search query for further data aggregation.

36. The medium of claim 35, wherein the search query is a web search query.

37. The medium of claim 35, wherein the search query is a social search query.

38. The medium of claim 35, wherein the search query is an email data aggregation query.

39. The medium of claim 37, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.

40. The medium of claim 34, further comprising instructions to:

generate a search query using the updated social graph; and

provide the generated search query for further data aggregation.

41. The medium of claim 39, wherein the search query is a web search query.

42. The medium of claim 39, wherein the search query is a social search query.

43. The medium of claim 41, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.

44. The medium of claim 34, wherein the entity is one of: an Internet Protocol address; an individual; a pair of associated individuals; and a household; an office space; and an organization.

CLAIMS

What is claimed is:

1. A centralized personal information platform processor-implemented method for enhancing transaction speed through the reduction of user input data transfer requirements, comprising:
 - aggregating data records including search results, purchase transaction data, service usage data, service enrollment data, email data and social data;
 - identifying data field types within the data records and their associated data values;
 - identifying an entity from the data field types and their associated data values;
 - generating, via a processor, correlations of the entity to other entities identifiable from the data field types and their associated data values;
 - associating, via the processor, attributes to the entity by drawing inferences related to the entity from the data field types and their associated data values;
 - generating an updated profile and social graph of the entity using the generated correlations and associated attributes; and
 - providing the updated profile and social graph for an automated web form filling request.
2. The method of claim 1, further comprising:
 - generating a search query using the updated profile; and
 - providing the generated search query for further data aggregation.
3. The method of claim 2, wherein the search query is a web search query.
4. The method of claim 2, wherein the search query is a social search query.
5. The method of claim 2, wherein the search query is an email data aggregation query.
6. The method of claim 4, wherein the updated profile includes a social login credential; and wherein the social search query utilizes the social login credential.

1 7. The method of claim 1, further comprising:

2 generating a search query using the updated social graph; and
3 providing the generated search query for further data aggregation.

4 8. The method of claim 6, wherein the search query is a web search query.

5 9. The method of claim 6, wherein the search query is a social search query.

6 10. The method of claim 8, wherein the updated profile includes a social login
7 credential; and wherein the social search query utilizes the social login credential.

8 11. The method of claim 1, wherein the entity is one of: an Internet Protocol
9 address; an individual; a pair of associated individuals; and a household; an office
10 space; and an organization.

11 12. A merchant analytics platform processor-implemented method for reduced
12 transaction wait processing requirements through the use of customized transaction
13 parameters based on a distributed linking node mesh, comprising:

14 obtaining a request for a merchant analytics report including a user
15 identification;

16 aggregating user data of the user in a centralized personal information
17 database;

18 retrieving the aggregated user data in response to obtaining the request for
19 the merchant analytics report;

20 generating a user behavior profile using an analytical model, based on the
21 aggregated user data retrieved from the centralized personal information database;

22 providing the user behavior profile as part of the merchant analytics
23 report.

24 13. The method of claim 12, further comprising:

25 retrieving aggregated user data for a plurality of users from the centralized
26 personal information database;

27 generating a statistical user behavior profile using an analytical model,
28 based on the aggregated user data for the plurality of users retrieved from the
29 centralized personal information database; and

30 providing the statistical user behavior profile as part of the merchant
31 analytics report for the merchant.

1 14. The method of claim 12, wherein the retrieved aggregated user data includes
2 personally identifiable data associated with the user identification.

3 15. The method of claim 14, further comprising:

4 anonymizing the retrieved aggregated user data by removing the
5 personally identifiable data from the retrieved aggregated user data.

6 16. The method of claim 12, wherein the aggregated user data includes social data
7 obtained from a social networking website.

8 17. The method of claim 16, wherein the user behavior profile is generated using
9 the social data obtained from the social networking website.

10 18. The method of claim 18, wherein the social data includes user social posts to
11 the social networking website.

12 19. The method of claim 12, further comprising:

13 determining a product or service having maximum likelihood of being
14 purchased by the user; and

15 providing an identification of the product or service as part of the
16 merchant analytics report.

17 20. The method of claim 13, wherein the statistical user behavior profile is
18 generated using aggregated social data obtained from social networking websites for the
19 plurality of users, and retrieved from the centralized personal information database.

20 21. The method of claim 12, further comprising:

21 triggering an investment action based on the merchant analytics report.

22 22. An analytical model sharing processor-implemented method for privacy
23 enhanced analytical model sharing through the use of contextual privacy dataset
24 modifications, comprising:

25 obtaining a request to publish an analytical model operating on user data
26 retrieved from a centralized personal information database;

27 determining whether the analytical model includes a model dataset;

28 upon determining that the analytical model includes a model dataset,
29 determining whether the model dataset includes personally identifiable information;

30 and

1 generating a determination of whether to accept the request to publish the
2 analytical model based on whether the model dataset includes personally identifiable
3 information.

4 23. The method of claim 22, further comprising:

5 determining that model dataset does not include personally identifiable
6 information;

7 generating a notification of acceptance of the request to publish the
8 analytical model;

9 providing the analytical model for publication; and

10 providing the notification of acceptance of the request to publish the
11 analytical model.

12 24. The method of claim 22, further comprising:

13 determining that model dataset includes personally identifiable
14 information;

15 upon determining that the model dataset includes personally identifiable
16 information, determining whether the analytical model can be run in the absence of the
17 personally identifiable information; and

18 generating a determination of whether to accept the request to publish the
19 analytical model based on whether the analytical model can be run in the absence of the
20 personally identifiable information.

21 25. The method of claim 24, further comprising:

22 determining that analytical model can be run in the absence of the
23 personally identifiable information;

24 extracting the personally identifiable information from the model dataset;

25 providing the analytical model for publication excluding the personally
26 identifiable information from the model dataset; and

27 providing the notification of acceptance of the request to publish the
28 analytical model.

29 26. The method of claim 24, further comprising:

30 determining that the analytical model cannot be run in the absence of the
31 personally identifiable information;

1 upon determining that the analytical model cannot be run in the absence
2 of the personally identifiable information, determining whether the analytical model
3 can be run after anonymization of the personally identifiable information; and
4 generating a determination of whether to accept the request to publish the
5 analytical model based on whether the analytical model can be run after anonymization
6 of the personally identifiable information.

7 27. The method of claim 26, further comprising:

8 determining that the analytical model can be run after anonymization of
9 the personally identifiable information;

10 anonymizing the personally identifiable information in the model dataset;

11 providing the analytical model for publication including the anonymized
12 personally identifiable information in the model dataset; and

13 providing the notification of acceptance of the request to publish the
14 analytical model.

15 28. The method of claim 26, further comprising:

16 determining that the analytical model cannot be run after anonymization
17 of the personally identifiable information; and

18 providing a notification of rejection of the request to publish the analytical
19 model.

20 29. The method of claim 22, wherein the user data retrieved from a centralized
21 personal information database is that of a single user.

22 30. The method of claim 22, wherein the user data retrieved from a centralized
23 personal information database is aggregated user data.

24 31. The method of claim 22, wherein the analytical model is published to a
25 publicly-accessible model sharing website.

26 32. An encryptmatics extensible markup language data conversion processor-
27 implemented method for increased efficiency in contextless user model sharing through
28 the use of intermediary meta-language processing, comprising:

29 receiving an input model containing non-meta-data based language
30 commands;

31 retrieving input language definition records corresponding to the input
32 model language commands;

1 retrieving meta-data based language definition records; and
2 generating a meta-data based language command file using the input
3 language definition records and the meta-based language definition records.

4 33. The method of claim 32, additionally comprising:

5 determining at least one non-conditional logic flow block in the input
6 model language commands; and

7 generating a meta-data based language execution block for the at least one
8 non-conditional logic flow block.

9 34. The method of claim 32, additionally comprising:

10 determining a meta-data based language variable initialization template;

11 and

12 creating a meta-data based language content block based on the variable
13 initialization template and non-variable definitions contained within the input language
14 model commands.

15 35. The method of claim 32, additionally comprising:

16 determining that the input model language commands contain
17 instructions to manipulate an external data source;

18 determining that the external data source contains data that may not be
19 used by the input model;

20 executing iterative sequential anonymization commands on the external
21 data source; determining that the external data source is available for use by the input
22 model; and

23 providing the anonymized external data source to the input model
24 commands for model execution on the anonymized data.

25 36. The method of claim 35, wherein determining that the external data source is
26 available for use by the input model includes an indication that a minimum count of
27 iterative sequential anonymization commands have been executed on the external data
28 source.

29 37. The method of claim 32, additionally comprising:

30 providing the meta-data based language command file to a user model
31 sharing service if it is determined that the model does not contain commands to
32 manipulate an external data source that contains data requiring anonymization.

- 1 38. An processor-implemented method, comprising:
2 aggregating, from a plurality of entities, raw mesh entries comprising any of:
3 emails, engagement transactions, financial transactions, social media entries, into
4 memory;
5 determining an mesh entry type for each raw mesh entry;
6 placing contents of each raw mesh entry into an unprocessed mesh entry
7 structure;
8 setting the mesh entry type for the unprocessed mesh entry from the determined
9 mesh entry type;
10 generating a dictionary hash entry from the raw mesh entry and saving it into the
11 unprocessed mesh entry structure;
12 updating a mesh entry dictionary with the unprocessed mesh entry structure;
13 replicating the mesh entry dictionary to another location without the raw mesh
14 entry in the mesh entry structure, wherein the replicated mesh entry dictionary is
15 actionable for analysis without the raw mesh entry and with the dictionary has entry
16 and set mesh entry type;
17 storing the unprocessed mesh entry structure into a multi-directionally linked
18 multimedia data mesh (MLMD mesh);
19 determining correlations within the unprocessed mesh entry structure with other
20 stored mesh entry structures in the MLMD mesh;
21 creating links to the determined correlated stored mesh entry structures and
22 storing them in the stored unprocessed mesh entry structure;
23 marking the unprocessed mesh entry structure as a processed mesh entry
24 structure.
- 25 39. The method of claim 38, wherein processed mesh entry structures are
26 updated with category, interest group, product type, price, and location information.
- 27 40. The method of claim 39, further, comprising:
28 obtaining a purchase request for a specified interest group, a specified interest
29 group qualifier, an unspecified merchant, an unspecified product for a specified
30 amount.
- 31 41. The method of claim 40, further, comprising:

1 wherein the unspecified product is determined by a consumer specified interest
2 group qualifier of the specified interest group.

3 42. The method of claim 41, wherein the consumer specified interest group
4 qualifier is any of best, most popular, most expensive, most exclusive, best deal.

5 43. The method of claim 42, further, comprising:
6 querying the MLMD mesh with the purchase request for a specified amount;
7 obtaining MLMD mesh query results for the purchase request;
8 querying merchants with the MLMD mesh query results for purchase items
9 satisfying the purchase request;

10 placing an order for purchase items satisfying the purchase request.

11 44. The method of claim 43, further, comprising:
12 wherein if no purchase items satisfy the purchase request, the purchase request is
13 maintained until cancelled.

14 45. The method of claim 44, further, comprising:
15 wherein the maintained purchase request may result in a purchase when
16 merchant items satisfy the purchase request as such items parameters change with time.

17 46. A centralized personal information platform processor-implemented system
18 for enhancing transaction speed through the reduction of user input data transfer
19 requirements, comprising:

20 means to aggregate data records including search results, purchase
21 transaction data, service usage data, service enrollment data, email data and social data;

22 means to identify data field types within the data records and their
23 associated data values;

24 means to identify an entity from the data field types and their associated
25 data values;

26 means to generate, via a processor, correlations of the entity to other
27 entities identifiable from the data field types and their associated data values;

28 means to associate, via the processor, attributes to the entity by drawing
29 inferences related to the entity from the data field types and their associated data
30 values;

31 means to generate an updated profile and social graph of the entity using
32 the generated correlations and associated attributes; and

1 means to provide the updated profile and social graph for an automated
2 web form filling request.

3 47. The system of claim 46, further comprising:

4 means to generate a search query using the updated profile; and
5 means to provide the generated search query for further data aggregation.

6 48. The system of claim 47, wherein the search query is a web search query.

7 49. The system of claim 47, wherein the search query is a social search query.

8 50. The system of claim 47, wherein the search query is an email data
9 aggregation query.

10 51. The system of claim 49, wherein the updated profile includes a social login
11 credential; and wherein the social search query utilizes the social login credential.

12 52. The system of claim 46, further comprising:

13 means to generate a search query using the updated social graph; and
14 means to provide the generated search query for further data aggregation.

15 53. The system of claim 51, wherein the search query is a web search query.

16 54. The system of claim 51, wherein the search query is a social search query.

17 55. The system of claim 53, wherein the updated profile includes a social login
18 credential; and wherein the social search query utilizes the social login credential.

19 56. The system of claim 46, wherein the entity is one of: an Internet Protocol
20 address; an individual; a pair of associated individuals; and a household; an office
21 space; and an organization.

22 57. A merchant analytics platform processor-implemented system for reduced
23 transaction wait processing requirements through the use of customized transaction
24 parameters based on a distributed linking node mesh, comprising:

25 means to obtain a request for a merchant analytics report including a user
26 identification;

27 means to aggregate user data of the user in a centralized personal
28 information database;

29 means to retrieve the aggregated user data in response to obtaining the
30 request for the merchant analytics report;

1 means to generate a user behavior profile using an analytical model, based
2 on the aggregated user data retrieved from the centralized personal information
3 database;

4 means to provide the user behavior profile as part of the merchant
5 analytics report.

6 58. The system of claim 57, further comprising:

7 means to retrieve aggregated user data for a plurality of users from the
8 centralized personal information database;

9 means to generate a statistical user behavior profile using an analytical
10 model, based on the aggregated user data for the plurality of users retrieved from the
11 centralized personal information database; and

12 means to provide the statistical user behavior profile as part of the
13 merchant analytics report for the merchant.

14 59. The system of claim 57, wherein the retrieved aggregated user data includes
15 personally identifiable data associated with the user identification.

16 60. The system of claim 59, further comprising:

17 means to anonymize the retrieved aggregated user data by removing the
18 personally identifiable data from the retrieved aggregated user data.

19 61. The system of claim 57, wherein the aggregated user data includes social data
20 obtained from a social networking website.

21 62. The system of claim 61, wherein the user behavior profile is generated using
22 the social data obtained from the social networking website.

23 63. The system of claim 63, wherein the social data includes user social posts to
24 the social networking website.

25 64. The system of claim 57, further comprising:

26 means to determine a product or service having maximum likelihood of
27 being purchased by the user; and

28 means to provide an identification of the product or service as part of the
29 merchant analytics report.

30 65. The system of claim 58, wherein the statistical user behavior profile is
31 generated using aggregated social data obtained from social networking websites for the
32 plurality of users, and retrieved from the centralized personal information database.

1 66. The system of claim 57, further comprising:

2 means to trigger an investment action based on the merchant analytics
3 report.

4 67. An analytical model sharing processor-implemented system for privacy
5 enhanced analytical model sharing through the use of contextual privacy dataset
6 modifications, comprising:

7 means to obtain a request to publish an analytical model operating on user
8 data retrieved from a centralized personal information database;

9 means to determine whether the analytical model includes a model
10 dataset;

11 means to upon determining that the analytical model includes a model
12 dataset, determining whether the model dataset includes personally identifiable
13 information; and

14 means to generate a determination of whether to accept the request to
15 publish the analytical model based on whether the model dataset includes personally
16 identifiable information.

17 68. The system of claim 67, further comprising:

18 means to determine that model dataset does not include personally
19 identifiable information;

20 means to generate a notification of acceptance of the request to publish the
21 analytical model;

22 means to provide the analytical model for publication; and

23 means to provide the notification of acceptance of the request to publish
24 the analytical model.

25 69. The system of claim 67, further comprising:

26 means to determine that model dataset includes personally identifiable
27 information;

28 means to upon determining that the model dataset includes personally
29 identifiable information, determining whether the analytical model can be run in the
30 absence of the personally identifiable information; and

1 means to generate a determination of whether to accept the request to
2 publish the analytical model based on whether the analytical model can be run in the
3 absence of the personally identifiable information.

4 70. The system of claim 69, further comprising:

5 means to determine that analytical model can be run in the absence of the
6 personally identifiable information;

7 means to extract the personally identifiable information from the model
8 dataset;

9 means to provide the analytical model for publication excluding the
10 personally identifiable information from the model dataset; and

11 means to provide the notification of acceptance of the request to publish
12 the analytical model.

13 71. The system of claim 69, further comprising:

14 means to determine that the analytical model cannot be run in the absence
15 of the personally identifiable information;

16 means to upon determining that the analytical model cannot be run in the
17 absence of the personally identifiable information, determining whether the analytical
18 model can be run after anonymization of the personally identifiable information; and

19 means to generate a determination of whether to accept the request to
20 publish the analytical model based on whether the analytical model can be run after
21 anonymization of the personally identifiable information.

22 72. The system of claim 71, further comprising:

23 means to determine that the analytical model can be run after
24 anonymization of the personally identifiable information;

25 means to anonymize the personally identifiable information in the model
26 dataset;

27 means to provide the analytical model for publication including the
28 anonymized personally identifiable information in the model dataset; and

29 means to provide the notification of acceptance of the request to publish
30 the analytical model.

31 73. The system of claim 71, further comprising:

1 means to determine that the analytical model cannot be run after
2 anonymization of the personally identifiable information; and

3 means to provide a notification of rejection of the request to publish the
4 analytical model.

5 74. The system of claim 67, wherein the user data retrieved from a centralized
6 personal information database is that of a single user.

7 75. The system of claim 67, wherein the user data retrieved from a centralized
8 personal information database is aggregated user data.

9 76. The system of claim 67, wherein the analytical model is published to a
10 publicly-accessible model sharing website.

11

1 77. An encryptmatics extensible markup language data conversion processor-
2 implemented system for increased efficiency in contextless user model sharing through
3 the use of intermediary meta-language processing, comprising:

4 means to receive an input model containing non-meta-data based
5 language commands;

6 means to retrieve input language definition records corresponding to the
7 input model language commands;

8 means to retrieve meta-data based language definition records; and

9 means to generate a meta-data based language command file using the
10 input language definition records and the meta-based language definition records.

11 78. The system of claim 77, additionally comprising:

12 means to determine at least one non-conditional logic flow block in the
13 input model language commands; and

14 means to generate a meta-data based language execution block for the at
15 least one non-conditional logic flow block.

16 79. The system of claim 77, additionally comprising:

17 means to determine a meta-data based language variable initialization
18 template; and

19 means to create a meta-data based language content block based on the
20 variable initialization template and non-variable definitions contained within the input
21 language model commands.

22 80. The system of claim 77, additionally comprising:

23 means to determine that the input model language commands contain
24 instructions to manipulate an external data source;

25 means to determine that the external data source contains data that may
26 not be used by the input model;

27 means to execute iterative sequential anonymization commands on the
28 external data source; determining that the external data source is available for use
29 by the input model; and

30 means to provide the anonymized external data source to the input model
31 commands for model execution on the anonymized data.

1 81. The system of claim 80, wherein determining that the external data source is
2 available for use by the input model includes an indication that a minimum count of
3 iterative sequential anonymization commands have been executed on the external data
4 source.

5 82. The system of claim 77, additionally comprising:

6 means to provide the meta-data based language command file to a user
7 model sharing service if it is determined that the model does not contain commands to
8 manipulate an external data source that contains data requiring anonymization.

9 83. An processor-implemented system, comprising:

10 means to aggregate, from a plurality of entities, raw mesh entries comprising any
11 of: emails, engagement transactions, financial transactions, social media entries, into
12 memory;

13 means to determine an mesh entry type for each raw mesh entry;

14 means to place contents of each raw mesh entry into an unprocessed mesh entry
15 structure;

16 means to set the mesh entry type for the unprocessed mesh entry from the
17 determined mesh entry type;

18 means to generate a dictionary hash entry from the raw mesh entry and saving it
19 into the unprocessed mesh entry structure;

20 means to update a mesh entry dictionary with the unprocessed mesh entry
21 structure;

22 means to replicate the mesh entry dictionary to another location without the raw
23 mesh entry in the mesh entry structure, wherein the replicated mesh entry dictionary is
24 actionable for analysis without the raw mesh entry and with the dictionary has entry
25 and set mesh entry type;

26 means to store the unprocessed mesh entry structure into a multi-directionally
27 linked multimedia data mesh (MLMD mesh);

28 means to determine correlations within the unprocessed mesh entry structure
29 with other stored mesh entry structures in the MLMD mesh;

30 means to create links to the determined correlated stored mesh entry structures
31 and storing them in the stored unprocessed mesh entry structure;

1 means to mark the unprocessed mesh entry structure as a processed mesh entry
2 structure.

3 84. The system of claim 83, wherein processed mesh entry structures are
4 updated with category, interest group, product type, price, and location information.

5 85. The system of claim 84, further, comprising:

6 means to obtain a purchase request for a specified interest group, a specified
7 interest group qualifier, an unspecified merchant, an unspecified product for a specified
8 amount.

9 86. The system of claim 85, further, comprising:

10 wherein the unspecified product is determined by a consumer specified interest
11 group qualifier of the specified interest group.

12 87. The system of claim 86, wherein the consumer specified interest group
13 qualifier is any of best, most popular, most expensive, most exclusive, best deal.

14 88. The system of claim 87, further, comprising:

15 means to query the MLMD mesh with the purchase request for a specified
16 amount;

17 means to obtainin MLMD mesh query results for the purchase request;

18 means to query merchants with the MLMD mesh query results for purchase
19 items satisfying the purchase request;

20 means to place an order for purchase items satisfying the purchase request.

21 89. The system of claim 88, further, comprising:

22 wherein if no purchase items satisfy the purchase request, the purchase request is
23 maintained until cancelled.

24 90. The system of claim 89, further, comprising:

25 wherein the maintained purchase request may result in a purchase when
26 merchant items satisfy the purchase request as such items parameters change with time.

27 91. A centralized personal information platform processor-implemented
28 apparatus for enhancing transaction speed through the reduction of user input data
29 transfer requirements, comprising:

30 a memory;

1 a processor disposed in communication with said memory, and configured to
2 issue a plurality of processing instructions stored in the memory, wherein the processor
3 issues instructions to:

4 aggregate data records including search results, purchase transaction data,
5 service usage data, service enrollment data, email data and social data;

6 identify data field types within the data records and their associated data
7 values;

8 identify an entity from the data field types and their associated data
9 values;

10 generate, via a processor, correlations of the entity to other entities
11 identifiable from the data field types and their associated data values;

12 associate, via the processor, attributes to the entity by drawing inferences
13 related to the entity from the data field types and their associated data values;

14 generate an updated profile and social graph of the entity using the
15 generated correlations and associated attributes; and

16 provide the updated profile and social graph for an automated web form
17 filling request.

18 92. The apparatus of claim 91, further comprising instructions to:

19 generate a search query using the updated profile; and

20 provide the generated search query for further data aggregation.

21 93. The apparatus of claim 92, wherein the search query is a web search query.

22 94. The apparatus of claim 92, wherein the search query is a social search query.

23 95. The apparatus of claim 92, wherein the search query is an email data
24 aggregation query.

25 96. The apparatus of claim 94, wherein the updated profile includes a social login
26 credential; and wherein the social search query utilizes the social login credential.

27 97. The apparatus of claim 91, further comprising instructions to:

28 generate a search query using the updated social graph; and

29 provide the generated search query for further data aggregation.

30 98. The apparatus of claim 96, wherein the search query is a web search query.

31 99. The apparatus of claim 96, wherein the search query is a social search query.

1 100. The apparatus of claim 98, wherein the updated profile includes a social
2 login credential; and wherein the social search query utilizes the social login credential.

3 101. The apparatus of claim 91, wherein the entity is one of: an Internet Protocol
4 address; an individual; a pair of associated individuals; and a household; an office
5 space; and an organization.

6 102. A merchant analytics platform processor-implemented apparatus for
7 reduced transaction wait processing requirements through the use of customized
8 transaction parameters based on a distributed linking node mesh, comprising:

9 a memory;

10 a processor disposed in communication with said memory, and configured to
11 issue a plurality of processing instructions stored in the memory, wherein the processor
12 issues instructions to:

13 obtainin a request for a merchant analytics report including a user
14 identification;

15 aggregate user data of the user in a centralized personal information
16 database;

17 retrieve the aggregated user data in response to obtaining the request for
18 the merchant analytics report;

19 generate a user behavior profile using an analytical model, based on the
20 aggregated user data retrieved from the centralized personal information database;

21 provide the user behavior profile as part of the merchant analytics report.

22 103. The apparatus of claim 102, further comprising instructions to:

23 retrieve aggregated user data for a plurality of users from the centralized
24 personal information database;

25 generate a statistical user behavior profile using an analytical model, based
26 on the aggregated user data for the plurality of users retrieved from the centralized
27 personal information database; and

28 provide the statistical user behavior profile as part of the merchant
29 analytics report for the merchant.

30 104. The apparatus of claim 102, wherein the retrieved aggregated user data
31 includes personally identifiable data associated with the user identification.

32 105. The apparatus of claim 104, further comprising instructions to:

1 anonymize the retrieved aggregated user data by removing the personally
2 identifiable data from the retrieved aggregated user data.

3 106. The apparatus of claim 102, wherein the aggregated user data includes social
4 data obtained from a social networking website.

5 107. The apparatus of claim 106, wherein the user behavior profile is generated
6 using the social data obtained from the social networking website.

7 108. The apparatus of claim 108, wherein the social data includes user social
8 posts to the social networking website.

9 109. The apparatus of claim 102, further comprising instructions to:

10 determine a product or service having maximum likelihood of being
11 purchased by the user; and

12 provide an identification of the product or service as part of the merchant
13 analytics report.

14 110. The apparatus of claim 103, wherein the statistical user behavior profile is
15 generated using aggregated social data obtained from social networking websites for the
16 plurality of users, and retrieved from the centralized personal information database.

17 111. The apparatus of claim 102, further comprising instructions to:

18 trigger an investment action based on the merchant analytics report.

19 112. An analytical model sharing processor-implemented apparatus for privacy
20 enhanced analytical model sharing through the use of contextual privacy dataset
21 modifications, comprising:

22 a memory;

23 a processor disposed in communication with said memory, and configured to
24 issue a plurality of processing instructions stored in the memory, wherein the processor
25 issues instructions to:

26 obtain a request to publish an analytical model operating on user data
27 retrieved from a centralized personal information database;

28 determine whether the analytical model includes a model dataset;

29 upon determining that the analytical model includes a model dataset,
30 determining whether the model dataset includes personally identifiable information;

31 and

1 generate a determination of whether to accept the request to publish the
2 analytical model based on whether the model dataset includes personally identifiable
3 information.

4 113. The apparatus of claim 112, further comprising instructions to:

5 determine that model dataset does not include personally identifiable
6 information;

7 generate a notification of acceptance of the request to publish the
8 analytical model;

9 provide the analytical model for publication; and

10 provide the notification of acceptance of the request to publish the
11 analytical model.

12 114. The apparatus of claim 112, further comprising instructions to:

13 determine that model dataset includes personally identifiable information;

14 upon determining that the model dataset includes personally identifiable
15 information, determining whether the analytical model can be run in the absence of the
16 personally identifiable information; and

17 generate a determination of whether to accept the request to publish the
18 analytical model based on whether the analytical model can be run in the absence of the
19 personally identifiable information.

20 115. The apparatus of claim 114, further comprising instructions to:

21 determine that analytical model can be run in the absence of the
22 personally identifiable information;

23 extract the personally identifiable information from the model dataset;

24 provide the analytical model for publication excluding the personally
25 identifiable information from the model dataset; and

26 provide the notification of acceptance of the request to publish the
27 analytical model.

28 116. The apparatus of claim 114, further comprising instructions to:

29 determine that the analytical model cannot be run in the absence of the
30 personally identifiable information;

1 upon determining that the analytical model cannot be run in the absence
2 of the personally identifiable information, determining whether the analytical model
3 can be run after anonymization of the personally identifiable information; and

4 generate a determination of whether to accept the request to publish the
5 analytical model based on whether the analytical model can be run after anonymization
6 of the personally identifiable information.

7 117. The apparatus of claim 116, further comprising instructions to:

8 determine that the analytical model can be run after anonymization of the
9 personally identifiable information;

10 anonymize the personally identifiable information in the model dataset;

11 provide the analytical model for publication including the anonymized
12 personally identifiable information in the model dataset; and

13 provide the notification of acceptance of the request to publish the
14 analytical model.

15 118. The apparatus of claim 116, further comprising instructions to:

16 determine that the analytical model cannot be run after anonymization of
17 the personally identifiable information; and

18 provide a notification of rejection of the request to publish the analytical
19 model.

20 119. The apparatus of claim 112, wherein the user data retrieved from a
21 centralized personal information database is that of a single user.

22 120. The apparatus of claim 112, wherein the user data retrieved from a
23 centralized personal information database is aggregated user data.

24 121. The apparatus of claim 112, wherein the analytical model is published to a
25 publicly-accessible model sharing website.

26

1 122. An encryptmatics extensible markup language data conversion processor-
2 implemented apparatus for increased efficiency in contextless user model sharing
3 through the use of intermediary meta-language processing, comprising:

4 a memory;

5 a processor disposed in communication with said memory, and configured to
6 issue a plurality of processing instructions stored in the memory, wherein the processor
7 issues instructions to:

8 receive an input model containing non-meta-data based language
9 commands;

10 retrieve input language definition records corresponding to the input
11 model language commands;

12 retrieve meta-data based language definition records; and

13 generate a meta-data based language command file using the input
14 language definition records and the meta-based language definition records.

15 123. The apparatus of claim 122, additionally comprising instructions to:

16 determine at least one non-conditional logic flow block in the input model
17 language commands; and

18 generate a meta-data based language execution block for the at least one
19 non-conditional logic flow block.

20 124. The apparatus of claim 122, additionally comprising instructions to:

21 determine a meta-data based language variable initialization template;
22 and

23 create a meta-data based language content block based on the variable
24 initialization template and non-variable definitions contained within the input language
25 model commands.

26 125. The apparatus of claim 122, additionally comprising instructions to:

27 determine that the input model language commands contain instructions
28 to manipulate an external data source;

29 determine that the external data source contains data that may not be used
30 by the input model;

1 execute iterative sequential anonymization commands on the external
2 data source; determining that the external data source is available for use by the input
3 model; and

4 provide the anonymized external data source to the input model
5 commands for model execution on the anonymized data.

6 126. The apparatus of claim 125, wherein determining that the external data
7 source is available for use by the input model includes an indication that a minimum
8 count of iterative sequential anonymization commands have been executed on the
9 external data source.

10 127. The apparatus of claim 122, additionally comprising instructions to:

11 provide the meta-data based language command file to a user model
12 sharing service if it is determined that the model does not contain commands to
13 manipulate an external data source that contains data requiring anonymization.

14 128. An processor-implemented apparatus, comprising:

15 a memory;

16 a processor disposed in communication with said memory, and configured to
17 issue a plurality of processing instructions stored in the memory, wherein the processor
18 issues instructions to:

19 aggregate, from a plurality of entities, raw mesh entries comprising any of:
20 emails, engagement transactions, financial transactions, social media entries, into
21 memory;

22 determine an mesh entry type for each raw mesh entry;

23 place contents of each raw mesh entry into an unprocessed mesh entry
24 structure;

25 set the mesh entry type for the unprocessed mesh entry from the
26 determined mesh entry type;

27 generate a dictionary hash entry from the raw mesh entry and saving it
28 into the unprocessed mesh entry structure;

29 update a mesh entry dictionary with the unprocessed mesh entry
30 structure;

1 replicate the mesh entry dictionary to another location without the raw
2 mesh entry in the mesh entry structure, wherein the replicated mesh entry dictionary is
3 actionable for analysis without the raw mesh entry and with the dictionary has entry
4 and set mesh entry type;

5 store the unprocessed mesh entry structure into a multi-directionally
6 linked multimedia data mesh (MLMD mesh);

7 determine correlations within the unprocessed mesh entry structure with
8 other stored mesh entry structures in the MLMD mesh;

9 create links to the determined correlated stored mesh entry structures and
10 storing them in the stored unprocessed mesh entry structure;

11 mark the unprocessed mesh entry structure as a processed mesh entry
12 structure.

13 129. The apparatus of claim 128, wherein processed mesh entry structures are
14 updated with category, interest group, product type, price, and location information.

15 130. The apparatus of claim 129, further, comprising instructions to:
16 obtain a purchase request for a specified interest group, a specified interest group
17 qualifier, an unspecified merchant, an unspecified product for a specified amount.

18 131. The apparatus of claim 130, further, comprising instructions to:
19 wherein the unspecified product is determined by a consumer specified interest
20 group qualifier of the specified interest group.

21 132. The apparatus of claim 131, wherein the consumer specified interest group
22 qualifier is any of best, most popular, most expensive, most exclusive, best deal.

23 133. The apparatus of claim 132, further, comprising instructions to:
24 query the MLMD mesh with the purchase request for a specified amount;
25 obtain MLMD mesh query results for the purchase request;
26 query merchants with the MLMD mesh query results for purchase items
27 satisfying the purchase request;

28 place an order for purchase items satisfying the purchase request.

29 134. The apparatus of claim 133, further, comprising instructions to:
30 wherein if no purchase items satisfy the purchase request, the purchase request is
31 maintained until cancelled.

32 135. The apparatus of claim 134, further, comprising instructions to:

1 wherein the maintained purchase request may result in a purchase when
2 merchant items satisfy the purchase request as such items parameters change with time.

3 136. A non-transitory medium storing processor-issuable instructions for a
4 centralized personal information platform processor-implemented to:

5 aggregate data records including search results, purchase transaction data,
6 service usage data, service enrollment data, email data and social data;

7 identify data field types within the data records and their associated data
8 values;

9 identify an entity from the data field types and their associated data
10 values;

11 generate, via a processor, correlations of the entity to other entities
12 identifiable from the data field types and their associated data values;

13 associate, via the processor, attributes to the entity by drawing inferences
14 related to the entity from the data field types and their associated data values;

15 generate an updated profile and social graph of the entity using the
16 generated correlations and associated attributes; and

17 provide the updated profile and social graph for an automated web form
18 filling request.

19 137. The medium of claim 136, further comprising instructions to:

20 generate a search query using the updated profile; and

21 provide the generated search query for further data aggregation.

22 138. The medium of claim 137, wherein the search query is a web search query.

23 139. The medium of claim 137, wherein the search query is a social search query.

24 140. The medium of claim 137, wherein the search query is an email data
25 aggregation query.

26 141. The medium of claim 139, wherein the updated profile includes a social login
27 credential; and wherein the social search query utilizes the social login credential.

28 142. The medium of claim 136, further comprising instructions to:

29 generate a search query using the updated social graph; and

30 provide the generated search query for further data aggregation.

31 143. The medium of claim 141, wherein the search query is a web search query.

32 144. The medium of claim 141, wherein the search query is a social search query.

1 145. The medium of claim 143, wherein the updated profile includes a social login
2 credential; and wherein the social search query utilizes the social login credential.

3 146. The medium of claim 136, wherein the entity is one of: an Internet Protocol
4 address; an individual; a pair of associated individuals; and a household; an office
5 space; and an organization.

6 147. A merchant analytics platform processor-implemented medium storing
7 instructions for reduced transaction wait processing requirements through the use of
8 customized transaction parameters based on a distributed linking node mesh to:

9 obtain a request for a merchant analytics report including a user
10 identification;

11 aggregate user data of the user in a centralized personal information
12 database;

13 retrieve the aggregated user data in response to obtaining the request for
14 the merchant analytics report;

15 generate a user behavior profile using an analytical model, based on the
16 aggregated user data retrieved from the centralized personal information database;

17 provide the user behavior profile as part of the merchant analytics report.

18 148. The medium of claim 147, further comprising instructions to:

19 retrieve aggregated user data for a plurality of users from the centralized
20 personal information database;

21 generate a statistical user behavior profile using an analytical model, based
22 on the aggregated user data for the plurality of users retrieved from the centralized
23 personal information database; and

24 provide the statistical user behavior profile as part of the merchant
25 analytics report for the merchant.

26 149. The medium of claim 147, wherein the retrieved aggregated user data
27 includes personally identifiable data associated with the user identification.

28 150. The medium of claim 149, further comprising instructions to:

29 anonymize the retrieved aggregated user data by removing the personally
30 identifiable data from the retrieved aggregated user data.

31 151. The medium of claim 147, wherein the aggregated user data includes social
32 data obtained from a social networking website.

1 152. The medium of claim 151, wherein the user behavior profile is generated
2 using the social data obtained from the social networking website.

3 153. The medium of claim 153, wherein the social data includes user social posts
4 to the social networking website.

5 154. The medium of claim 147, further comprising instructions to:
6 determine a product or service having maximum likelihood of being
7 purchased by the user; and
8 provide an identification of the product or service as part of the merchant
9 analytics report.

10 155. The medium of claim 148, wherein the statistical user behavior profile is
11 generated using aggregated social data obtained from social networking websites for the
12 plurality of users, and retrieved from the centralized personal information database.

13 156. The medium of claim 147, further comprising instructions to:
14 trigger an investment action based on the merchant analytics report.

15 157. An analytical model sharing processor-implemented medium for privacy
16 enhanced analytical model sharing through the use of contextual privacy dataset
17 modifications, comprising instructions to:

18 obtain a request to publish an analytical model operating on user data
19 retrieved from a centralized personal information database;

20 determine whether the analytical model includes a model dataset;

21 upon determining that the analytical model includes a model dataset,
22 determining whether the model dataset includes personally identifiable information;

23 and

24 generate a determination of whether to accept the request to publish the
25 analytical model based on whether the model dataset includes personally identifiable
26 information.

27 158. The medium of claim 157, further comprising instructions to:

28 determine that model dataset does not include personally identifiable
29 information;

30 generate a notification of acceptance of the request to publish the
31 analytical model;

32 provide the analytical model for publication; and

1 provide the notification of acceptance of the request to publish the
2 analytical model.

3 159. The medium of claim 157, further comprising instructions to:

4 determine that model dataset includes personally identifiable information;
5 upon determining that the model dataset includes personally identifiable
6 information, determining whether the analytical model can be run in the absence of the
7 personally identifiable information; and

8 generate a determination of whether to accept the request to publish the
9 analytical model based on whether the analytical model can be run in the absence of the
10 personally identifiable information.

11 160. The medium of claim 159, further comprising instructions to:

12 determine that analytical model can be run in the absence of the
13 personally identifiable information;

14 extract the personally identifiable information from the model dataset;

15 provide the analytical model for publication excluding the personally
16 identifiable information from the model dataset; and

17 provide the notification of acceptance of the request to publish the
18 analytical model.

19 161. The medium of claim 159, further comprising instructions ti:

20 determine that the analytical model cannot be run in the absence of the
21 personally identifiable information;

22 upon determining that the analytical model cannot be run in the absence
23 of the personally identifiable information, determining whether the analytical model
24 can be run after anonymization of the personally identifiable information; and

25 generate a determination of whether to accept the request to publish the
26 analytical model based on whether the analytical model can be run after anonymization
27 of the personally identifiable information.

28 162. The medium of claim 161, further comprising instructions to:

29 determine that the analytical model can be run after anonymization of the
30 personally identifiable information;

31 anonymize the personally identifiable information in the model dataset;

1 provide the analytical model for publication including the anonymized
2 personally identifiable information in the model dataset; and

3 provide the notification of acceptance of the request to publish the
4 analytical model.

5 163. The medium of claim 161, further comprising instructions to:

6 determine that the analytical model cannot be run after anonymization of
7 the personally identifiable information; and

8 provide a notification of rejection of the request to publish the analytical
9 model.

10 164. The medium of claim 157, wherein the user data retrieved from a centralized
11 personal information database is that of a single user.

12 165. The medium of claim 157, wherein the user data retrieved from a centralized
13 personal information database is aggregated user data.

14 166. The medium of claim 157, wherein the analytical model is published to a
15 publicly-accessible model sharing website.

16 167. An encryptmatics extensible markup language data conversion processor-
17 implemented medium storing instructions for increased efficiency in contextless user
18 model sharing through the use of intermediary meta-language processing to:

19 receive an input model containing non-meta-data based language
20 commands;

21 retrieve input language definition records corresponding to the input
22 model language commands;

23 retrieve meta-data based language definition records; and

24 generate a meta-data based language command file using the input
25 language definition records and the meta-based language definition records.

26 168. The medium of claim 167, additionally comprising instructions to:

27 determine at least one non-conditional logic flow block in the input model
28 language commands; and

29 generate a meta-data based language execution block for the at least one
30 non-conditional logic flow block.

31 169. The medium of claim 167, additionally comprising instructions to:

1 determine a meta-data based language variable initialization template;
2 and

3 create a meta-data based language content block based on the variable
4 initialization template and non-variable definitions contained within the input language
5 model commands.

6 170. The medium of claim 167, additionally comprising instructions to:

7 determine that the input model language commands contain instructions
8 to manipulate an external data source;

9 determine that the external data source contains data that may not be used
10 by the input model;

11 execute iterative sequential anonymization commands on the external
12 data source; determine that the external data source is available for use by the input
13 model; and

14 provide the anonymized external data source to the input model
15 commands for model execution on the anonymized data.

16 171. The medium of claim 170, wherein determining that the external data source
17 is available for use by the input model includes an indication that a minimum count of
18 iterative sequential anonymization commands have been executed on the external data
19 source.

20 172. The medium of claim 167, additionally comprising instructions to:

21 provide the meta-data based language command file to a user model
22 sharing service if it is determined that the model does not contain commands to
23 manipulate an external data source that contains data requiring anonymization.

24 173. An processor-implemented medium containing instructions to:

25 aggregate, from a plurality of entities, raw mesh entries comprising any of:
26 emails, engagement transactions, financial transactions, social media entries, into
27 memory;

28 determine an mesh entry type for each raw mesh entry;

29 place contents of each raw mesh entry into an unprocessed mesh entry structure;

30 set the mesh entry type for the unprocessed mesh entry from the determined
31 mesh entry type;

1 generate a dictionary hash entry from the raw mesh entry and saving it into the
2 unprocessed mesh entry structure;

3 update a mesh entry dictionary with the unprocessed mesh entry structure;

4 replicate the mesh entry dictionary to another location without the raw mesh
5 entry in the mesh entry structure, wherein the replicated mesh entry dictionary is
6 actionable for analysis without the raw mesh entry and with the dictionary has entry
7 and set mesh entry type;

8 store the unprocessed mesh entry structure into a multi-directionally linked
9 multimedia data mesh (MLMD mesh);

10 determine correlations within the unprocessed mesh entry structure with other
11 stored mesh entry structures in the MLMD mesh;

12 create links to the determined correlated stored mesh entry structures and
13 storing them in the stored unprocessed mesh entry structure;

14 mark the unprocessed mesh entry structure as a processed mesh entry structure.

15 174. The medium of claim 173, wherein processed mesh entry structures are
16 updated with category, interest group, product type, price, and location information.

17 175. The medium of claim 174, further, comprising instructions to:

18 obtain a purchase request for a specified interest group, a specified interest group
19 qualifier, an unspecified merchant, an unspecified product for a specified amount.

20 176. The medium of claim 175, further, comprising instructions to:

21 wherein the unspecified product is determined by a consumer specified interest
22 group qualifier of the specified interest group.

23 177. The medium of claim 176, wherein the consumer specified interest group
24 qualifier is any of best, most popular, most expensive, most exclusive, best deal.

25 178. The medium of claim 177, further, comprising instructions to:

26 query the MLMD mesh with the purchase request for a specified amount;

27 obtain MLMD mesh query results for the purchase request;

28 query merchants with the MLMD mesh query results for purchase items
29 satisfying the purchase request;

30 place an order for purchase items satisfying the purchase request.

31 179. The medium of claim 178, further, comprising instructions to:

1 wherein if no purchase items satisfy the purchase request, the purchase request is
2 maintained until cancelled.

3 180. The medium of claim 179, further, comprising instructions to:

4 wherein the maintained purchase request may result in a purchase when
5 merchant items satisfy the purchase request as such items parameters change with time.

6