

[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; 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 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 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 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 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; 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 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 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 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 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; 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 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 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 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 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; 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 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 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 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 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;