single storage device and being directly connected to computer 705, it may be implemented over a plurality of storage devices that are located remotely from computer 705, and coupled to computer 705 by way of communication network 770.

[0072] FIG. 8 is a flowchart of transaction evaluation process 725, which commences with step 805.

[0073] In step 805, processor 710 reads a transaction record from transaction database 775. The transaction record concerns a transaction between two entities, e.g., a buyer and a seller.

[0074] In step 810, processor 710 identifies the entities involved in the transaction. In a preferred embodiment, each entity is matched to a Data Universal Numbering System (DUNS) number, which can thereafter be used to identify the entity.

[0075] In step 815, processor 710 adds to reference table 750, data concerning the transaction. As explained below, reference table 750 will be used during an execution of discovery process 730 to produce data structure 755.

[0076] In step 820, processor 710 determines whether there are more records in transaction database 775 to be processed. If YES, transaction evaluation process 725 loops back to step 805. If NO, transaction evaluation process 725 progresses to step 825.

[0077] In step 825, transaction evaluation process 725 ends.

[0078] Table 7, below, is an exemplary representation of reference table 750. In Table 7, S1 – S9 are shorthand representations for Suppliers 1 – 9, respectively. For example, Row 1 represents a transaction between Supplier 1 and Supplier 3, where Supplier 1 is a buyer, and Supplier 3 is a seller.

WHAT IS CLAIMED IS:

1. A method comprising:

(I) executing a discovery process to perform operations of:

(a) examining records that describe transactions between entities; and

(b) constructing, in a database, a data structure that represents a relationship network, based on said transactions,

wherein said relationship network represents (i) a first entity and (ii) a second entity that is N tiers from said first entity, where N is a whole number greater than or equal to 2,

wherein said data structure provides a path, from said second entity to said first entity, via one or more intermediary entities, and

wherein said discovery process includes a recursive mapping operation that:

(i) utilizes, in a processing loop within said discovery process, a stack that stores entities of interest, and

(ii) for an entity of interest from said stack, wherein said entity of interest is in a tier, repeatedly considers said records to find a related entity in a next tier, adds said related entity to said data structure, and continues until reaching tier N; and

(II) calculating a relevance of said second entity to said first entity as a function of (a) a characteristic of said second entity, and (b) a relevance of said one or more intermediary entities to said first entity.

2. The method of claim 1, wherein said relevance is indicative of a feature selected from the group consisting of (a) a risk to said first entity, and (b) an opportunity for said first entity.

3. The method of claim 1, further comprising:

weighting said characteristic with a value that indicates that said second entity is N tiers from said first entity in said data structure.

4. The method of claim 1, further comprising:

weighting said characteristic with a value that indicates a criticality for said second entity selected from the group consisting of industry classification, transaction value, and product details.

5. The method of claim 1, wherein said relationship network comprises a supply chain from said second entity to said first entity.

6. The method of claim 1, wherein said relationship network comprises a customer chain from said second entity to said first entity.

7. A system comprising:

a processor; and

a memory that contains instructions that are readable by said processor to cause said processor to:

(I) execute a discovery process to:

(a) examine records that describe transactions between entities; and

(b) construct, in a database, a data structure that represents a relationship network, based on said transactions,

wherein said relationship network represents (i) a first entity and (ii) a second entity that is N tiers from said first entity, where N is a whole number greater than or equal to 2,

wherein said data structure provides a path, from said second entity to said first entity, via one or more intermediary entities, and

wherein said discovery process includes a recursive mapping operation that:

(i) utilizes, in a processing loop within said discovery process, a stack that stores entities of interest, and

(ii) for an entity of interest from said stack, wherein said entity of interest is in a tier, repeatedly considers said records to find a related entity in a next tier, adds said related entity

to said data structure, and continues until reaching tier N; and

(II) calculate a relevance of said second entity to said first entity as a function of (a) a characteristic of said second entity, and (b) a relevance of said one or more intermediary entities to said first entity.

8. The system of claim 7, wherein said relevance is indicative of a feature selected from the group consisting of (a) a risk to said first entity, and (b) an opportunity for said first entity.

9. The system of claim 7, wherein said instructions also cause said processor to:

weight said characteristic with a value that indicates that said second entity is N tiers from said first entity in said data structure.

10. The system of claim 7, wherein said instructions also cause said processor to:

weight said characteristic with a value that indicates criticality for said second entity.

11. The system of claim 7, wherein said relationship network comprises a supply chain from said second entity to said first entity.

12. The system of claim 7, wherein said relationship network comprises a customer chain from said second entity to said first entity.

13. A tangible storage medium, comprising:

instructions that are readable by a processor to cause said processor to:

(I) execute a discovery process to:

(a) examine records that describe transactions between entities; and

(b) construct, in a database, a data structure that represents a relationship network, based on said transactions,

wherein said relationship network represents (i) a first entity and (ii) a second entity that is N tiers from said first entity, where N is a whole number greater than or equal to 2,

wherein said data structure provides a path, from said second entity to said first entity, via one or more intermediary entities, and

wherein said discovery process includes a recursive mapping operation that:

(i) utilizes, in a processing loop within said discovery process, a stack that stores entities of interest, and

(ii) for an entity of interest from said stack, wherein said entity of interest is in a tier, repeatedly considers said records to find a related entity in a next tier, adds said related entity to said data structure, and continues until reaching tier N; and

(II) calculate a relevance of said second entity to said first entity as a function of (a) a characteristic of said second entity, and (b) a relevance of said one or more intermediary entities to said first entity.

14. The tangible storage medium of claim 13, wherein said relevance is indicative of a feature selected from the group consisting of (a) a risk to said first entity, and (b) an opportunity for said first entity.

15. The tangible storage medium of claim 13, wherein said instructions also cause said processor to:

weight said characteristic with a value that indicates that said second entity is N tiers from said first entity in said data structure.

16. The tangible storage medium of claim 13, wherein said instructions also cause said processor to:

weight said characteristic with a value that indicates criticality for said second entity.

17. The tangible storage medium of claim 13, wherein said relationship network comprises a supply chain from said second entity to said first entity.

18. The tangible storage medium of claim 13, wherein said relationship network comprises a customer chain from said second entity to said first entity.