CLAIMS

What is claimed is:

1. A method comprising:

receiving specification information for a data package, the data package including i) a data product; ii) services associated with a data product; or iii) a combination of i and ii;

determining a plurality of product attributes based at least in part on the specification information;

identifying, for each of the plurality of product attributes, an alphanumeric product attribute code;

generating a search uniform package identifier (UPID) for the data package based at least in part on the plurality of alphanumeric product attribute codes, wherein the search UPID is alphanumeric, the search UPID including a plurality of component codes concatenated in a preset order, the plurality of component codes including the plurality of alphanumeric product attribute codes such that the search UPID includes each of the plurality of alphanumeric product attribute codes;

accessing a list of available data packages, each of the available data packages being associated with a respective available data package UPID, each respective available data package UPID including a respective plurality of component codes concatenated in the preset order;

determining that none of the available data package UPIDs include the search UPID;

identifying a subset of data packages from the list of available data packages based at least in part on the search UPID, the subset of data packages collectively satisfying the specification information associated with the search UPID; and

combining the identified subset of data packages into a combination package, the combination package satisfying the specification information associated with the search UPID.

2. The method of claim 1, further comprising:

determining a provider identifier based at least in part on the specification information, the provider identifier indicative of a provider of the data package; and

identifying an alphanumeric provider code based at least in part on the provider identifier, wherein generating the search UPID is further based at least in part on the alphanumeric provider code, and wherein the search UPID includes the alphanumeric provider code and the plurality of alphanumeric product attribute codes.

3. The method of claim 2, further comprising:

determining hierarchy information associated with the provider, the hierarchy information indicative of the hierarchical position of the provider with respect to one or more corporate affiliates of the provider; and

identifying an alphanumeric hierarchy code based at least in part on the hierarchy information, wherein generating the search UPID is further based at least in part on the alphanumeric hierarchy code, and wherein the search UPID includes the alphanumeric provider code and the hierarchy code.

4. The method of claim 2, wherein the plurality of product attributes includes a product code, wherein, for each of a plurality of potential providers of potential data products, the product code is uniquely indicative of a specific data product of the given potential provider.

5. The method of claim 1, wherein the plurality of product attributes includes i) a delivery method code, wherein the delivery method code is indicative of a storage form for delivery of the data product, a route of delivery for delivery of the data product, or a combination thereof; ii) a product delivery frequency code, wherein the product delivery frequency code is indicative of a frequency of delivery or a delay of delivery associated with the data product; iii) a solution code, wherein the solution code is indicative of a targeted use associated with the data product; iv) a classification code, wherein the classification code is indicative of one or more targeted use cases associated with the solution code; v) a geography code, wherein the geography code is indicative of a geographical region associated with the data product; or vi) any combination of i-v.

6. The method of claim 1, wherein the data package is associated with one or more service attributes, wherein the method further comprises:

determining the one or more service attributes based at least in part on the specification information; and

identifying, for each of the one or more service attributes, an alphanumeric service attribute code, wherein generating the search UPID is further based at least in part on the one or more alphanumeric service attribute codes, and wherein the search UPID includes the one or more alphanumeric service attribute codes and the plurality of alphanumeric product attribute codes.

7. The method of claim 6, wherein the one or more service attributes includes: i) a data source attribute indicative of an entity that provided the data package; ii) a data originator attribute indicative of an original creator of the data package; iii) a content frequency attribute indicative of at least one of timing and frequency of update of content of the data package; iv) a metadata presence attribute indicative of whether additional metadata is included with the data package; v) one or more modifying attributes indicative of supplemental characteristics associated with the data package; or vi) any combination of i-v.

8. The method of claim 1, further comprising:

facilitating receipt of the combination package in response to combining the identified subset of data packages into the combination package.

9. The method of claim 1, wherein receiving the specification information includes:

receiving an open text input; and

parsing the open text input to extract the specification information.

10. The method of claim 1, further comprising generating an invoice based at least in part on the search UPID, wherein generating the invoice includes:

accessing the search UPID;

identifying a price associated with the search UPID; and

preparing the invoice using the price associated with the search UPID.

11. The method of claim 10, wherein identifying the price associated with the search UPID includes:

identifying, for one or more of the plurality of product attributes, pricing information associated with the respective product attribute; and

calculating the price associated with the search UPID based at least in part on the pricing information for each of the one or more of the plurality of product attributes.

12. The method of claim 1, wherein receiving the specification information occurs in response to receiving a user input, and wherein the method further comprises presenting the search UPID using an output device coupled to the computing device.

13. The method of claim 1, wherein at least one of the plurality of product attributes includes a set of component attributes, wherein identifying the alphanumeric product attribute code for the at least one of the plurality of product attributes includes identifying a code indicative of the set of component attributes.

14. The method of claim 1, wherein at least one of the plurality of product attributes includes a set of component attributes, wherein identifying the alphanumeric product attribute code for the at least one of the plurality of product attributes includes:

determining a count of component attributes in the set of component attributes;

determining a basket indicator code based at least in part on the count of component attributes;

determining a component attribute code for each component attribute of the set of component attributes; and

determining the alphanumeric product attribute code by concatenating the basket indicator code and each of the component attribute codes.

15. A system comprising:

one or more data processors; and

a non-transitory computer-readable storage medium containing instructions which, when executed on the one or more data processors, cause the one or more data processors to perform operations including:

receiving specification information for a data package, the data package including i) a data product; ii) services associated with a data product; or iii) a combination of i and ii;

determining a plurality of product attributes based at least in part on the specification information;

identifying, for each of the plurality of product attributes, an alphanumeric product attribute code;

generating a search uniform package identifier (UPID) for the data package based at least in part on the plurality of alphanumeric product attribute codes, wherein the search UPID is alphanumeric, the search UPID including a plurality of component codes concatenated in a preset order, the plurality of component codes including the plurality of alphanumeric product attribute codes such that the search UPID includes each of the plurality of alphanumeric product attribute codes;

accessing a list of available data packages, each of the available data packages being associated with a respective available data package UPID, each respective available data package UPID including a respective plurality of component codes concatenated in the preset order;

determining that none of the available data package UPIDs include the search UPID;

identifying a subset of data packages from the list of available data packages based at least in part on the search UPID, the subset of data packages collectively satisfying the specification information associated with the search UPID; and

combining the identified subset of data packages into a combination package, the combination package satisfying the specification information associated with the search UPID.

16. The system of claim 15, wherein the operations further include:

determining a provider identifier based at least in part on the specification information, the provider identifier indicative of a provider of the data package;

identifying an alphanumeric provider code based at least in part on the provider identifier, wherein generating the search UPID is further based at least in part on the alphanumeric provider code, and wherein the search UPID includes the alphanumeric provider code and the plurality of alphanumeric product attribute codes;

determining hierarchy information associated with the provider, the hierarchy information indicative of the hierarchical position of the provider with respect to one or more corporate affiliates of the provider; and

identifying an alphanumeric hierarchy code based at least in part on the hierarchy information, wherein generating the search UPID is further based at least in part on the alphanumeric hierarchy code, and wherein the search UPID includes the alphanumeric provider code and the hierarchy code.

17. The system of claim 16, wherein the plurality of product attributes includes i) a delivery method code, wherein the delivery method code is indicative of a storage form for delivery of the data product, a route of delivery for delivery of the data product, or a combination thereof; ii) a product delivery frequency code, wherein the product delivery frequency code is indicative of a frequency of delivery or a delay of delivery associated with the data product; iii) a solution code, wherein the solution code is indicative of a targeted use associated with the data product; iv) a classification code, wherein the classification code is indicative of one or more targeted use cases associated with the solution code; v) a geography code, wherein the geography code is indicative of a geographical region associated with the data product; or vi) any combination of i-v.

18. A computer-program product tangibly embodied in a non-transitory machine-readable storage medium, including instructions configured to cause a data processing apparatus to perform operations including:

receiving specification information for a data package, the data package including i) a data product; ii) services associated with a data product; or iii) a combination of i and ii;

determining a plurality of product attributes based at least in part on the specification information;

identifying, for each of the plurality of product attributes, an alphanumeric product attribute code;

generating a search uniform package identifier (UPID) for the data package based at least in part on the plurality of alphanumeric product attribute codes, wherein the search UPID is alphanumeric, the search UPID including a plurality of component codes concatenated in a preset order, the plurality of component codes including the plurality of alphanumeric product attribute codes such that the search UPID includes each of the plurality of alphanumeric product attribute codes;

accessing a list of available data packages, each of the available data packages being associated with a respective available data package UPID, each respective available data package UPID including a respective plurality of component codes concatenated in the preset order;

determining that none of the available data package UPIDs include the search UPID;

identifying a subset of data packages from the list of available data packages based at least in part on the search UPID, the subset of data packages collectively satisfying the specification information associated with the search UPID; and

combining the identified subset of data packages into a combination package, the combination package satisfying the specification information associated with the search UPID.

19. The computer-program product of claim 18, wherein the operations further include:

determining a provider identifier based at least in part on the specification information, the provider identifier indicative of a provider of the data package;

identifying an alphanumeric provider code based at least in part on the provider identifier, wherein generating the search UPID is further based at least in part on the alphanumeric provider code, and wherein the search UPID includes the alphanumeric provider code and the plurality of alphanumeric product attribute codes;

determining hierarchy information associated with the provider, the hierarchy information indicative of the hierarchical position of the provider with respect to one or more corporate affiliates of the provider; and

identifying an alphanumeric hierarchy code based at least in part on the hierarchy information, wherein generating the search UPID is further based at least in part on the alphanumeric hierarchy code, and wherein the search UPID includes the alphanumeric provider code and the hierarchy code.

20. The computer-program product of claim 18, wherein the plurality of product attributes includes i) a delivery method code, wherein the delivery method code is indicative of a storage form for delivery of the data product, a route of delivery for delivery of the data product, or a combination thereof; ii) a product delivery frequency code, wherein the product delivery frequency code is indicative of a frequency of delivery or a delay of delivery associated with the data product; iii) a solution code, wherein the solution code is indicative of a targeted use associated with the data product; iv) a classification code, wherein the classification code is indicative of one or more targeted use cases associated with the solution code; v) a geography code, wherein the geography code is indicative of a geographical region associated with the data product; or vi) any combination of i-v.