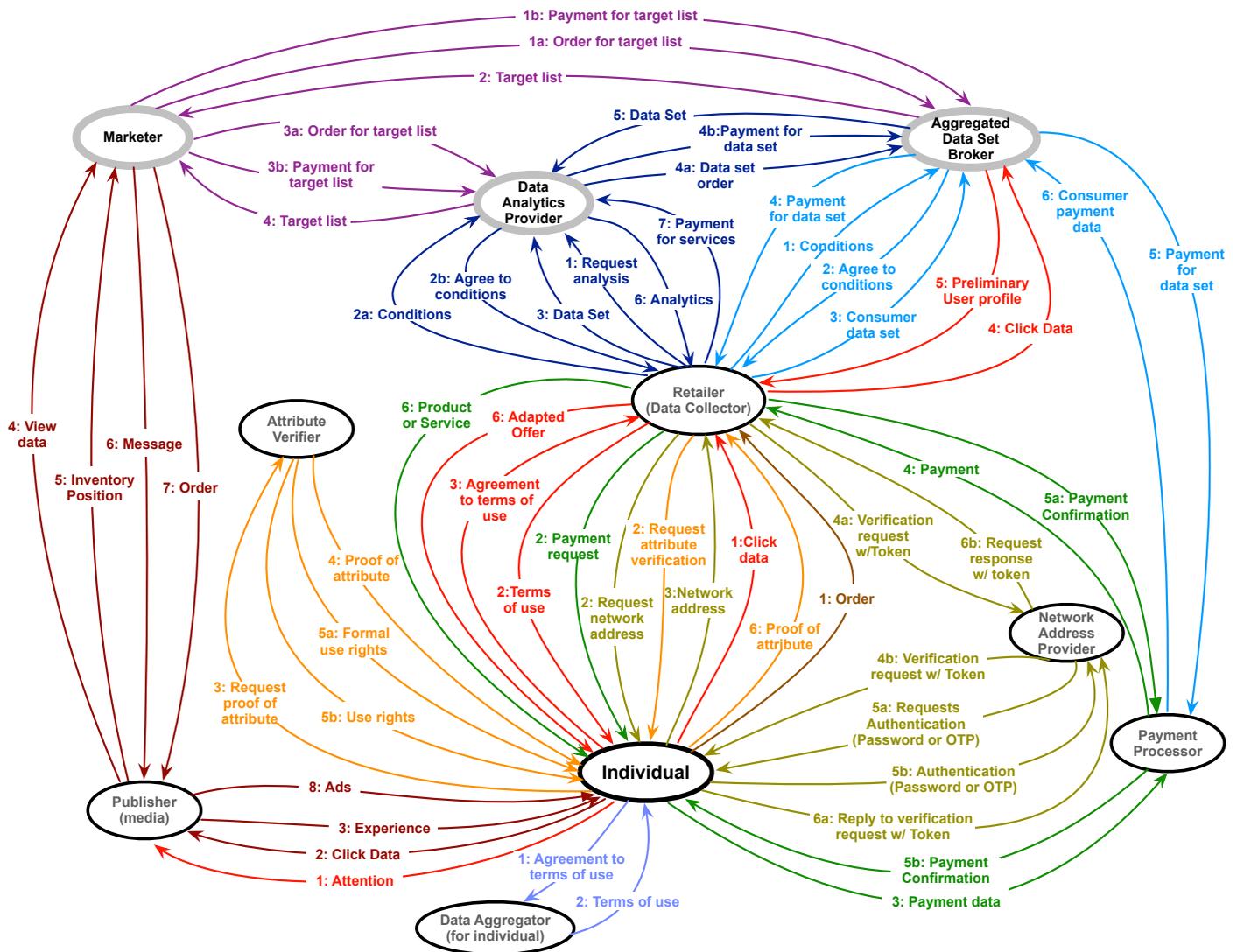


A Value Network Map defines the roles in a business ecosystem and maps the value flows, both implicit and explicit, between them. The Personal Data Ecosystem Consortium developed this map in meetings with industry innovators during 2011.

The Value Network Map below shows the value flows (in a simplified form) in the current ecosystem around targeted advertising and data aggregation\*. The Individual is at the center and a next ring of parties has direct engagement with the individual (Publisher, Attribute Verifier, Data Collector, Network Address Provider, Payment Processors) while a wider ring does not (Marketers, Data Analytics Providers, Data Set Brokers).



Read the narrative and see the matching colored section of the map. There is a numbered value flow for each color that that goes with the narrative.

The individual puts their attention towards a publisher's website by clicking to view content; in doing so, data about the view and information about the ad inventory available in that viewing act is available to a marketer who places a message (ad) on the page which is viewed by the individual.

Persuaded by the ad, the individual goes to a retail store advertised; in doing so they become subject to the terms of use put forward by the site, and the data from the click is sent off to an aggregate data set broker. Using the click data (type of phone, IP Address etc) data broker shares with the retailer, a profile of the user. The retailer then uses this information to adapt the offer it makes to the user.

The individual likes the offer and places an order for an item that requires a proof of an attribute, such as being a student in a school, or being over the age of 19.

The individual must go to an attribute verifier to get proof of attribute (and they are also given explicit or implicit use rights). They then share this proof of attribute with the retailer.

Alternatively the user might choose to ask the Attribute Verifier to tell the Retailer directly about their status and in a non-user centric version of this the retailer could ask for attribute(s) from the provider without the individual's consent or awareness.

The retailer also requires a valid network end-point: a phone number or e-mail address by which to contact the individual. They request this from the individual and send a message to the address asking for confirmation.

Now the retailer is ready to charge the individual using a payment processor. Once the transaction goes through, the individual receives the item they ordered.

The data trails from the transaction continue: the retailer has a data set of transactions which it sells to a data broker. The payment processor also has data, and it too sells it to the data broker. Note that the Data Broker has no direct relationship to the Individual who's specific data is contained within the data set and shared with the broker.

The Retailer wants an analysis of their data and goes to a company that can provide that specific service. The data analytics company uses data from the data broker to help in its analysis.

The Marketer who is trying to find more information about who to target taps the services of the data broker and aggregator.

The whole map goes full circle when this data is used to shape the ads the individual sees when he or she goes to the publisher's website.

\* This builds on a submission to the FTC: <http://www.ftc.gov/bcp/workshops/privacyroundtables/personalDataEcosystem.pdf> and the graphic representation of the display and advertising industry by LUMAPartners: <http://www.lumapartners.com/resource-center/lumasclapes-2/>