

Data-trading standard's potential to uncover the value of data reserve

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People say data is the new dominant raw material replacing oil, to emphasize its economic significance. Many companies have unused data, and collectively, there is a massive amount of unutilized or residual data, which could enable new business models. On the other hand, not all businesses have a complete set of data to implement their ultimate goals. Therefore, the data's values could increase if freely shared or traded, especially because the data can be used multiple times for various purposes, often without decreasing the data's value. However, data trading is not widely accessible at this point, and we are underutilizing the existing data reserve.

Data are currently traded through bilateral arrangements or domain-specific network. For example, companies dealing with consumer finance often buy data related to individuals and real estate properties. The data are actively generated and provided, almost like a service. In other cases, such as in energy distribution, data is traded through networks specific to their industry. When the transactions are confined to a particular sector, it is relatively likely for the sellers and buyers to recognize each other. However, the industry-specific approaches are too narrowly scoped to extract the full value of general data.

IEEE P3800 working group, sponsored by IEEE Consumer Technology Society Digital Finance and Economy Standards Committee, aims to develop a standard for a general-purpose, open mechanism to trade a wide variety of data. Data providers can register the data before finding a buyer. The marketplace should be equipped with a search function so that the buyers can search through the catalog of data being offered to see what they need. The marketplace also should have a data-agnostic way of evaluating the quality of the data. Thus, a data marketplace becomes the central institution enabling multilateral transactions.

In this trading structure, each marketplace is also an independent and neutral entity to implement policies to comply with various privacy laws and the essence of the fair information practice principles. The privacy laws are a rapidly evolving area, mostly concerned about limiting mega-corporations and data brokers' activities, but they mostly forget many other forms of data uses. We'll need to debate fair regulations beneficial to the public and newer, innovative businesses operating on different profit models from mega-platforms. The P3800 standard should incorporate the necessary policies and enforcement mechanisms.

The idea of trading data is not new, but we need a fresh solution for the general-purpose data marketplace's challenges. The trust issue is central, and it needs to be established broadly, well beyond that of the transaction itself, because the data providers need to trust that the data won't be abused. The buyer needs to trust that the data is authentic and of good quality. We will have to find a solution by combining

technology, policies, and incentive structures so that data trading becomes an integral component of good value-creation. We encourage experts of one or more of these areas to join the P3800 working group.

References

1. <https://standards.ieee.org/project/3800.html>
2. <https://sagroups.ieee.org/3800/>

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