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Let's learn to share – Better forecasts through data sharing

Data is like a raw diamond, whose value is to be realised through analytics. On the other side, analysts and forecasters often hope to have more features and more data as input to their modelling and forecasting work. Data is becoming a commodity, though with very specific characteristics. We will then dive into various approaches to support and incentivise data sharing, from collaborative to market-based approaches. From a technical point of view, distributed optimisation approaches, communication capabilities and computing infrastructures are there to support the use of ever-increasing amounts of distributed data. Data is not just distributed geographically, but in terms of ownership. Very few will naturally and openly want to share their data – we have an incentive design problem. Over the last few years, we have proposed a number of market setups to purchase features (regression markets), labels (active learning markets) and forecasts (prediction markets – they already existed prior to our works, obviously!). Examples will be provided for a few applications e.g. energy and real estate, even though other areas with high potential (e.g., healthcare, IoT, etc.) will also be discussed.