# 6.11.5 Complex Data Models

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The OMG members recommend the Federal Reserve use Research Development Test & Evaluation (RDT&E) Funding in developing and perfecting how to model data on a blockchain and especially what data to store on a blockchain, what data t store off the blockchain, how to access of-blockchain data (i.e., Oracles).

Most of the data models underlying cryptocurrencies are pretty simple. Generally, it's a balance expressed as a simple unsigned, 256-bit integer. However, the cost of storing data on a blockchain is extremely high in comparison to other methods ( see OMG DIDO-RA Understanding Gas)). The restricted or reduced data storage and processing capability on a Blockchain mean that it will be more difficult to detect Criminal Activity directly on the blockchain. Consequently, it will have to rely on off-block data and processing to be successful. The question is: How will the on-block / off-block data and processes be modeled.

Another issue might be the need for Blockchains to be joined as a federation of blockchains or even a confederation of blockchains. For example, there may be two separate blockchains, one for domestic use and one for international use. The problem might get more complicated than that. There may need to be a blockchain for the purchasing and selling of stocks which is different than one used for retail.

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