Applications and Implications of The Universal Data Model

Sam Loy

"The more we understand the role information plays in our world, the more **skillful** citizens we will be."

– James Gleick, Wired Magazine, March 2011

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Dipping the Cup

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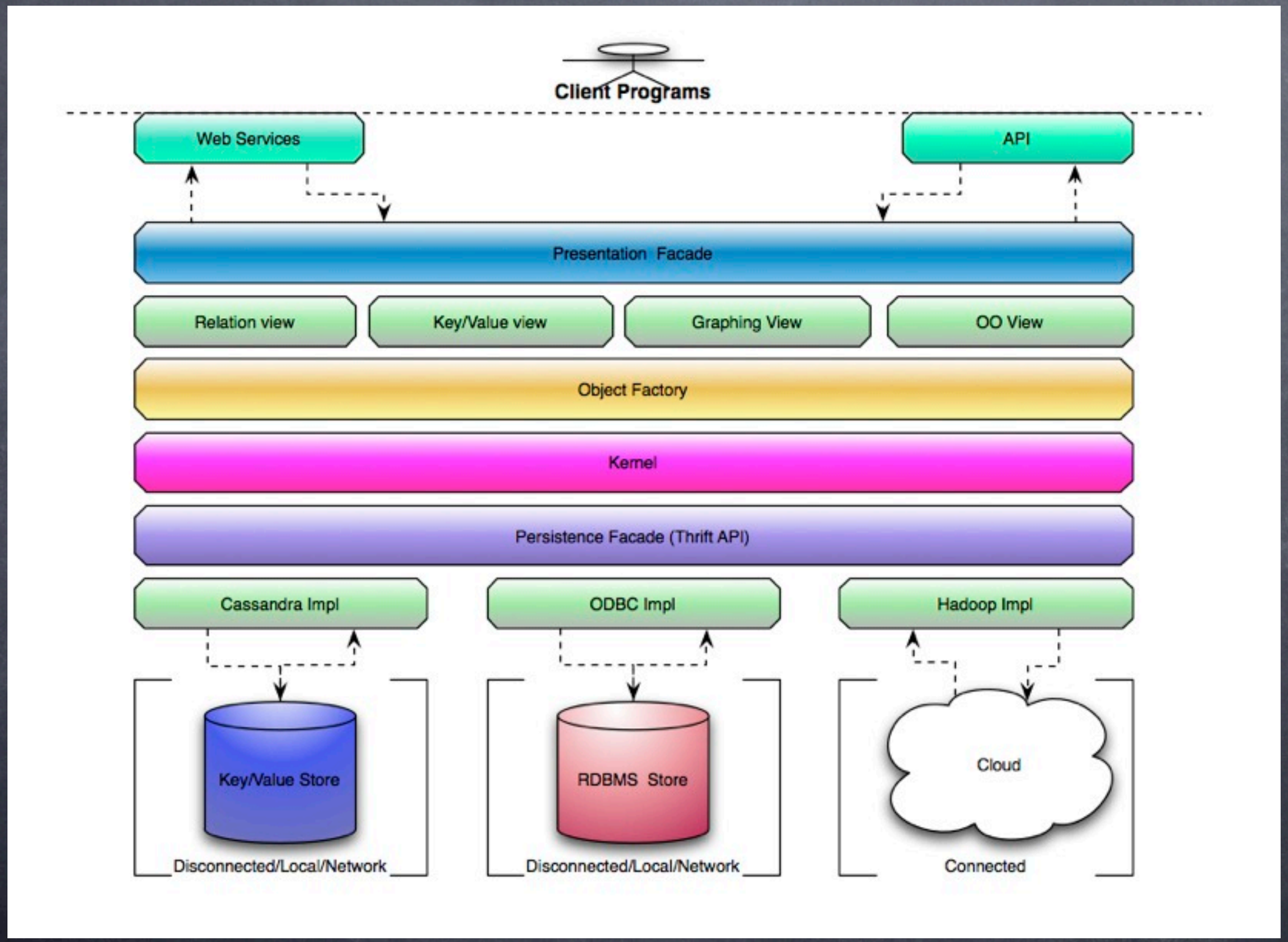
- Provide a high level technical overview of a DBMS using the UDM as the kernel.
- Touch on the Strengths and Weaknesses.
- Talk about a possible strategy to make money with it.

High Level Technical Overview (System)



Feature Highlights

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- 10x faster than Java 6 Reflection

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- Object Splicing

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- Generate Objects heuristically

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- Fetch only data needed for operation

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- Object Model Mapping

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  - Data model remains fully normalized

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- Realizes E.F. Codd's fully Relational Data Model

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- Data is naturally 6th Normal Form
- Eliminates need for surrogate PKs
- Naturally creates Referential Integrity

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  - Can deliver data context

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  - Can provide data context
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  - Can deliver data context
  - Eliminates "Defining the World" for every new Software project

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- Context, information, and discovery are changing so rapidly, that most Data Models are out-dated before they are completed.

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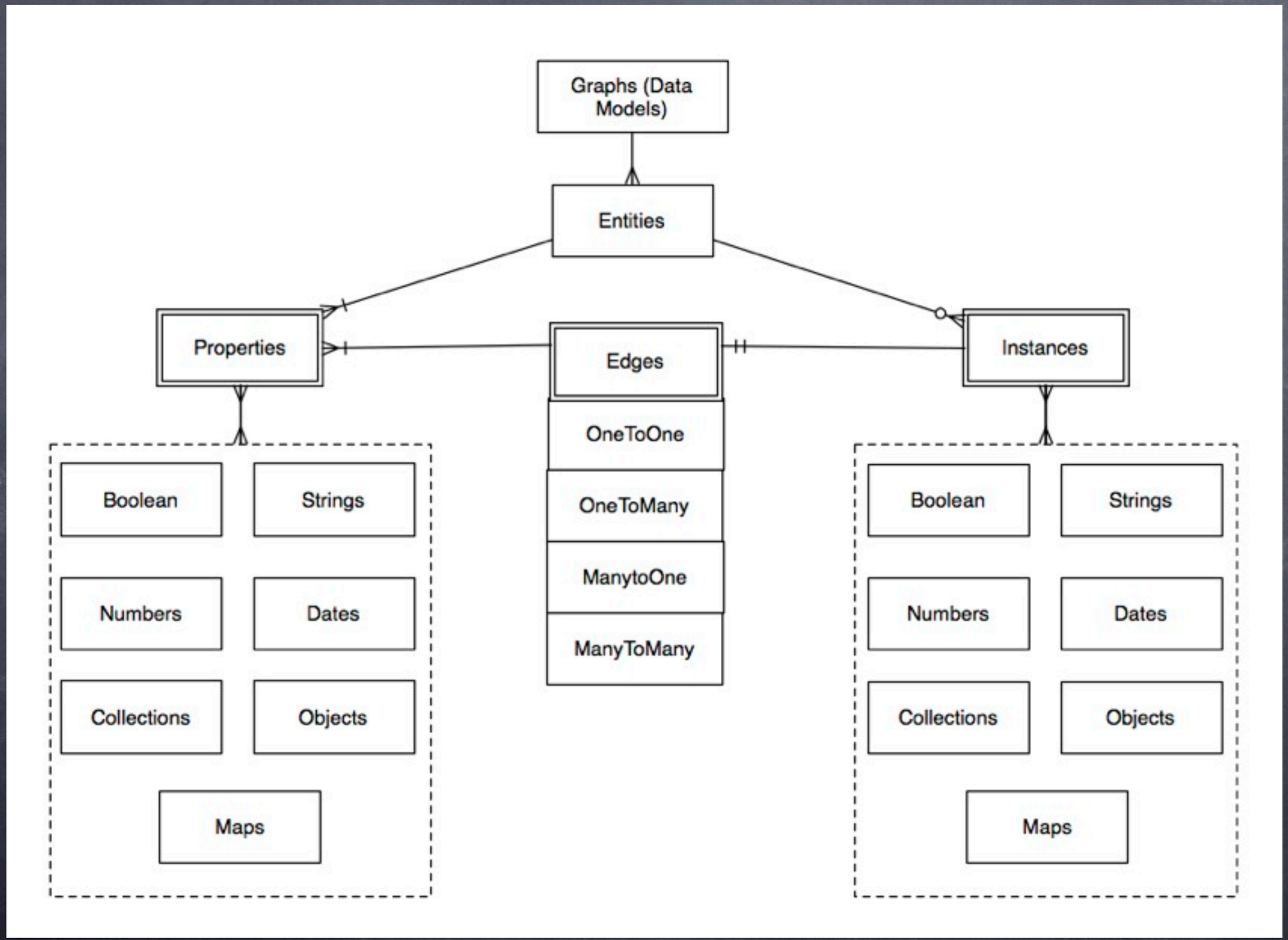
- The data being Modeled is changing from information Datum to Context Datum
- Context, information, and discovery are changing so rapidly, that most Data Models are out-dated before they are completed.
- Developer's should be focused on solving problems, not regurgitating tired ORM layers.

Quick look at the UDM Data Model...



Weaknesses

- RDBMS
- UDM

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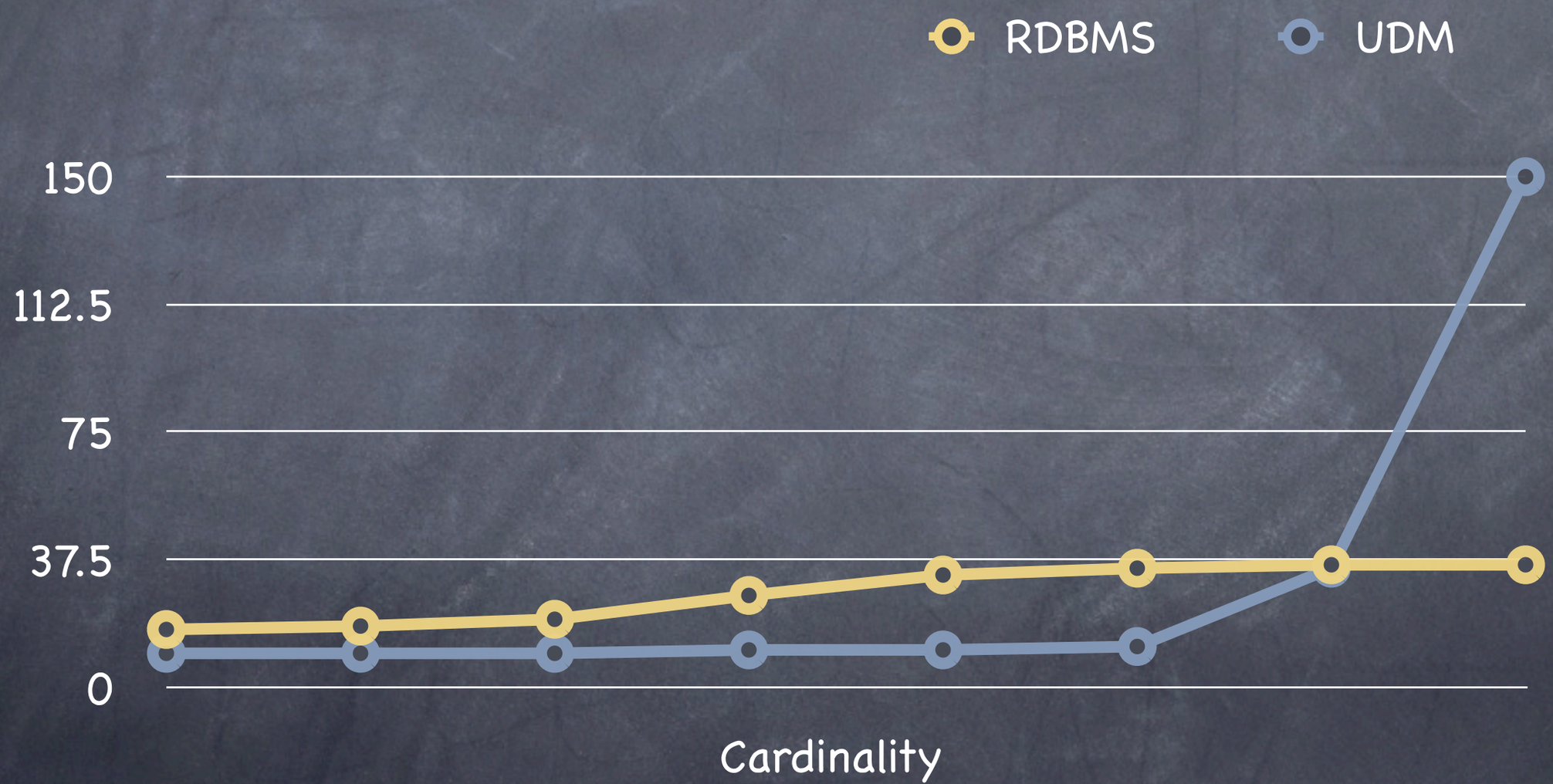

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  - Although SQL can be 100% supported, runtime "queries" must be transformed according to the underlying data store

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  - A new model is needed to understand how indexes can be created and utilized.