How to build massive scale databases

Some opinions

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Yahoo! Research
How to invent a database

Step 1: Discard SQL and ACID

Step 2: ???

Step 3: Profit!!
How to invent a database

• Approved method
  – Think hard about the right data and transaction model
  – Write code to enforce that model, and hopefully it is fast

• Modern method
  – Think hard about how to get scalability, elasticity, flexibility
  – Write code to provide those features, and hopefully the model is not too stinky

  Heresy!

• But all is not lost
  – Applications still need to do things that look like transaction processing
  – Lots of room to “improve” modern systems to do some (subset) of what a database can do