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## CRITIQUE PAPER

## **REFERENCE:**

Andrew Pavlo and Matthew Aslett. What's Really New with NewSQL?

- The conclusions of the study might not be generalizable to other systems or use cases and might only be applicable to the specific systems that were mentioned in the paper. Also, the paper's is published in 2016, the systems reviewed may have changed or new systems may have emerged.
- While the paper discussed about various systems and DB's. It addresses the
  quantitative side but not the qualitative side. I believe it lacks on qualitative analysis
  of the strengths and weaknesses of each system. If such analysis is made then we
  can see more details between the systems and their suitability for different cases.
- While the authors used YCSB to measure system's performance in terms of throughput and latency, this can be useful benchmark to be consider but It cannot be generalized and talk for all workload types. Because each companies has different workload depending on their business needs. The difference is that an online order taking web application have huge read and write operation while a social media has only more read operations.
- The paper does not address some of the challenges of distributed systems such as network partition and data inconsistency issues. The challenges have big impact on the performance and reliability.
- The paper mostly compares NoSQL systems and NewSQL systems. But NewSQL only supports relational model whereas NoSQL supports different models like graph and etc. NoSQL and NewSQL have different functionality and capabilities. The paper compares them like in general but in some cases it may not be appropriate to compare directly.
- As the paper mainly focuses on NoSQL and NewSQL systems as separate
  categories, the paper should have considered hybrid approaches that can combine
  benefits of both systems as I believe many companies and organizations would find
  this better solution and it is hard to change their ecosystems from one to another
  often.