Wyatt Blair

EMT-678-WS: Big Data Technologies

10/18/2024

**Class 5 - Stonebreaker One Size Fits All**

This paper examines what was, at the time, a common belief in DBMS: “One size fits all”. DBMSs were originally developed for business data processing and so, originally, the problems individual companies were facing only needed one solution. There are several good reasons for sticking with this development strategy; however, the modern demand for data processing is far from cookie-cutter in nature.

The paper points to a few burgeoning fields within which more specialized DBMSs would enhance performance of the service. For example: streaming, where data is being introduced to the DBMS in a constant flow. Originally, DBMSs were designed to perform Outbound processing which does not perform well in the streaming data processing regime. Instead, Inbound processing may be a more appropriate strategy; which was added to traditional DBMSs as an afterthought. The paper points also to several types of databases, not just database processing strategies, such as data warehouses, sensor networks, scientific databases, and XML databases, to illustrate the different needs of these types of databases. Again, highlighting the fact that “One Size Fits All” is an inaccurate assumption.