

ORIGINS OF THE SQL STANDARD

Talks about the origins of SQL

- Don't really care too much for it so won't waste time writing about it

SQL standard

- There are pros and cons when it comes to SQL standards:
 - o Pros
 - Reduced training cost: common language will make easier to retrain people
 - Productivity: IS (info sys.) professionals can become better and better over time in one language
 - Application portability: if applications are written in same language easier to port over
 - Reduced dependency on a vendor
 - ...
 - o Cons
 - Can stifle creativity and innovation

Many products are available that support SQL, and they run on machines of all sizes, from small personal computers to large mainframes.

- The number of relational database vendors with significant market share has continued to consolidate.
 - o Gartner Group reports that Oracle controlled almost 42 percent of the overall relational database management system market in 2015, Microsoft was in second place at 19 percent, and IBM came in third at 17 percent. Teradata and AWS (Amazon Web Services) also had significant—albeit much smaller—shares. Open source products, such as MySQL and PostgreSQL, together have a significant market share, with MySQL, an open source version of SQL that runs on Linux, UNIX, Windows, and Mac OS X operating systems, achieving considerable popularity.
- you will learn about new technologies that are not based on the relational model, including big data technologies such as Hadoop and so-called NoSQL (“Not Only SQL”) database management systems.
 - o They are gaining market popularity, but their financial share of the market is currently very small compared to the traditional SQL vendors.
- SQL's dominant role as a query and data manipulation language has, however, led to the creation of a wide variety of mechanisms that allow data stored on these new platforms to be accessed with SQL or an SQL-like language.

Because of its significant market share, we most often illustrate SQL in this text using Oracle 12c syntax. We use a specific relational DBMS not to promote or endorse Oracle but rather so we know that the code we use will work with some DBMS.

- In the vast majority of the cases, the code will, in fact, work with many relational DBMSs because it complies with standard ANSI SQL.