# Collaborative Discussion 2: Alternatives to SQL

Big Data is now a by-word that even those out with technology circles would have heard, however the means of gathering, analysing and storing it is the conundrum faced (Anuradha, 2015). To combat this there has arisen many open source NoSQL databases that are non-relational such as Cassandra and MongoDB.

A NoSQL database has the ability to store and retrieve data without it being in tables and having set relationships between these tables and can be used to analyse large sets of data and is ACID compliant (Vaish, 2013).

There tends to be one type of SQL, however there are four types of NoSQL, data in SQL tend to be in tables with fields displayed vertically, however a NoSQL can be set up vertically (Venkatraman, et al, 2016). In terms of speed it was found that SQL relational databases did work faster than No SQL (Ullah, 2015)

The main problem with NoSQL is that although it has been around since the 1960's, there is less expertise in this than there is in SQL, queries are not standardised and they are hard to set up and maintain (Hurst, 2010).

The aforementioned may well be true, however industry realise that there is masses of complex data and that they need to embrace different systems (Choi Et al, 2014) to analyse this and possibly gain competitive advantages.

A number of NoSQL databases are open source (Cassandra, MongoDB) and have horizontal scaling, however there is no specific interfaces (Agrawal, et al, 2008). There are also a large number of variances in NoSQL bases on their data modelling, which can impact performance.

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