



## **Rich Profile Correlation Module**

The key to a rich, robust, integrated data structure lies in finding out the relationships between each data point. To this end, our system used graph technology to ensure the connectivity of each data. Graph technology has been used by various organisations who relied on big data platforms, to ensure scalability and flexibility of their databases.

Our intelligent database system takes graph databases to a higher level by creating a hypergraph, essentially a graph of graphs, where every graph is connected in one way or another to a relevant graph to ensure maximum information value for each graph.



Graph paradigm goes well beyond databases and application development; it's a reimagining of what's possible around the idea of connections. And just like any new problem-solving framework, approaching a challenge from a different dimension often produces an orders-of-magnitude change in possible solutions.

Unlike other database management systems (DBMS), relationships take first priority in graph databases. In the graph world, connected data is equally (or more) important than individual data points.

This connections-first approach to data means relationships and connections are persisted (and not just temporarily calculated) through every part of the data lifecycle: from idea, to design in a logical model, to implementation in a physical model, to operation using a query language and to persistence within a scalable, reliable database system. This approach means your application doesn't have to infer data connections using things like foreign keys or out-of-band processing, like MapReduce.



To ensure the relationships, our system used machine learning algorithms to search for relationship patterns, and expand separate graphs where possible, so that each point in the graph is connected to their most logically plausible neighbour, and each graph connected with the most plausible pattern that the algorithms detected. This process results in a database that can continuously learn and expand its knowledge about the data stored.

This approach also allowed the database to create persistently rich profiles that are consistent both internally and structurally, with a uniform pattern across dimensions, simplifying analytic pipelines by homogenising the formats and minimising risks of error.



## For Further Information, Please Contact:



## Omni Global Technologies, PTE. LTD

105 Cecil Street, #13-01, The Octagon Singapore 069534 | +65 3157 1823 marketing@omniglobaltech.com.sg