

Barcelona Supercomputing Center

 The multidimensional **Big Data analytics platform**, built around data

TECHNOLOGY DESCRIPTION

Qbeast is a unified platform to serve, predict and analyse data. Through a web portal interface, users can access three main tools: **QDB**, a Data Base solution that includes the OTree patented technology, which enables hybrid row/columnar storage, approximate Big Data Analysis, and indexing and spatial data partitioning; **QML**, a handcrafted Machine Learning (ML) library that implements most common ML algorithms taking advantage of the QDB power; and **Qviz**, a data visualizer where data is mapped into 3D forms using advanced space reduction techniques, so that users can navigate into their data as they move in the real world, and simply see their data.

Our patented **MuSES architecture (Multidimensional Storage with Efficient Sampling)** combines sampling and indexing together to explore, analyse and query data much faster

Forget about old ETL architecture (Extract, Transform, Load), where different databases are needed. With our HTAP solution (Hybrid Transactional / Analytical Processing) you can use a single storage for all your business processes, avoiding overheads

AREAS

Big Data, Data Analytics, Data Visualization, Data Bases, Machine Learning, High Performance Computing





Human Brain Project



Barcelona Supercomputing Center
Centro Nacional de Supercomputación

COMPETITIVE ADVANTAGES



HTAP MuSES. No competitor supports both serving, analytics and approximated analysis in one single system



The only real-time Big Data visualization tool for data exploration, labelling, validation and anomaly detection



Spatial and sampling aware data parallelism makes it the only ML library designed for Big Data on the cloud



Big Data made easy, human and cheap. Less infrastructure, less development, more results

Qbeast is cloud-ready, thanks to its Kubernetes native deployment, that integrates with all major cloud providers

APPLICATION & MARKET POTENTIAL

Figures of targeted Markets:

\$ 5.35 B

Serviceable Available Market

Global Big Data as a Service

CAGR of **11.0%**
from 2017 to 2026

\$ 52 B

Total Available Market

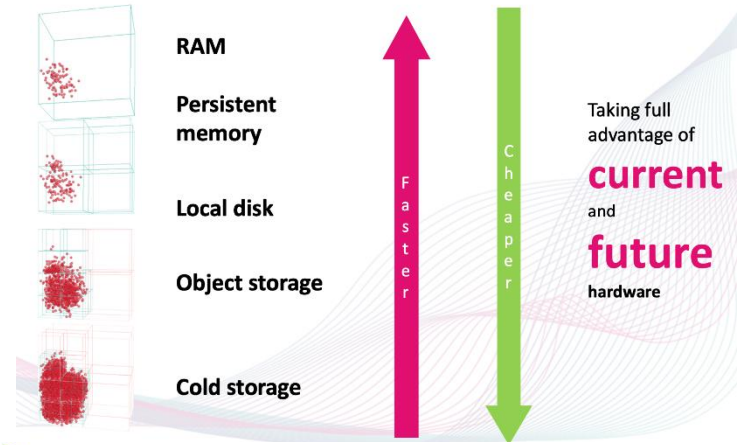
Global business analytics

CAGR of **38.7%**
from 2019 to 2025

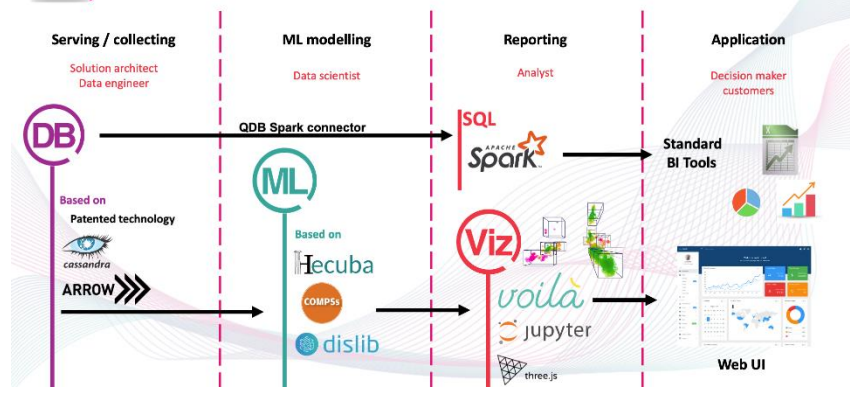
Target Customers:

- Medium-small size tech companies, with data in its core business
- Early adopters: Enterprise Cassandra and Spark users (market size \$300 M)

Tech sheet designed and co-developed by Universidad Politécnica de Madrid



beast.io a unified platform to serve/predict/analyze



TECHNOLOGY READINESS LEVEL



REFERENCES

Patent: "DISTRIBUTED INDEXES" PCT/EP2018/081340

Online prototype: <https://qbeast.io/>

Collaborators:



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Co-funded by the European Union