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
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:
  - Serviceable Available Market: $5.35 B
  - Total Available Market: $52 B
- CAGR of 11.0% from 2017 to 2026
- 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)

TECHNOLOGY READINESS LEVEL

7

REFERENCES

Online prototype: https://qbeast.io/

Collaborators:
- Atos
- IBM
- Intel
- CaixaBank
- FCA
- Software AG
- Telefónica
- ELEM

CONTACT

Cesare Cugnasco, Yolanda Becerra, Raül Sirvent
BSC, Barcelona, Spain
cesare.cugnasco@bsc.es, yolanda.becerra@bsc.es, raul.sirvent@bsc.es

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