Brytlyt Recognized for

2021

Technology Innovation Leadership

European GPU-powered
Database and Analytics Platform Industry
Excellence in Best Practices

FROST *&* SULLIVAN

Contents

Background and Company Performance

Industry Challenges

In the era of digital transformation, enterprises are overwhelmed by a massive surge in data and face the challenge of turning rapidly growing volumes of raw data into understandable, actionable insights. Companies, therefore, are struggling to generate value from data and are unable to achieve a short-term competitive advantage or long-term sustainability. To take action, decision makers need quick, impactful, and easy-to-interpret insights. Existing legacy data processing technology lacks the ability to run data analytics at the speeds that these decision makers require because traditional databases are not efficient enough to accelerate the data analytics process and overcome the modern data size, storage, and analysis challenges. Moreover, every company has a different need and process for deriving value or insights from the huge volumes of data available, wherein aligning with traditional technologies becomes extremely difficult.

The data analytics process involves multiple steps before data is actually analyzed, starting with data gathering and proceeding to data structuring and normalizing. This pre-structured, aggregated data allows users to answer only a specific set of predefined queries, making it difficult to customize to a business's changing requirements or perform ad-hoc analysis. Traditional approaches that use comparatively low-core count central processing units (CPUs) have been optimized for sequential serial processing to run queries, making any analytics at scale much slower. Furthermore, to accommodate the new data and generate new insights, data scientists have to rebuild the pre-structuring process each time, thus consuming time and resources in terms of adding fresh queries into the predefined set. This slow data analysis process, therefore, delays/negatively impacts companies' strategic decisions.

According to Frost & Sullivan research, an advanced database is needed that can accelerate the data analytics process and generate insights quickly by overcoming the challenges of the traditional CPU-based approach.

Technology Leverage and Business Impact

Commitment to Innovation

Brytlyt, a UK-based startup, has built the industry's most innovative GPU-powered database and analytics platform with the ability to analyze multi-billion row datasets in milliseconds. The platform uses a GPU database to analyze data queries, and Brytlyt is the only company with a patent-pending intellectual property (IP) in this space. The company was founded in 2013 by Richard Heyns, who, with over 15 years in business intelligence, Big Data, and software development, has first-hand experience of the issues of increasing data and slow analytics. This experience helped Richard form Bryltyt's core approach, ensuring that companies can easily integrate the solution to help them solve complex data problems from massive data sets in the shortest time possible.

In the past, Richard managed a team of SQL developers at dunnhumby, successfully migrating that company's flagship customer analytics insights solution to Oracle Exadata.

With this rich experience, Richard now leads a team of experts at Brytlyt that is constantly working to improve and innovate within the data analytics space and provide clients with access to the strategic insights they need to grow.

Commercialization Success and Technology Incubation

Brytlyt's GPU-powered database and analytics platform is transforming the way companies leverage data. Brytlyt's team spent five years developing the initial solution, which it continues to improve and enhance. The GPU-powered database and analytics platform, BrytlytDB, delivers good performance, compared to traditional single CPU databases, and the company has been successfully on-boarding customers since launching the solution in October 2017 through a partnership with Amazon Web Services (AWS). Furthermore, as of February 2018, Brytlyt has been partnering with IBM to reach out to prospective customers.

Brytlyt has uniquely combined artificial intelligence (AI) and open-source relational database PostgreSQL with the processing power of GPUs. PostgreSQL is the world's most advanced open-source relational database, making Brytlyt's platform highly compatible with existing systems and solutions. Unlike many competing solutions, Brytlyt's GPU platform does not need to pre-aggregate or preprogram data to generate results. The company's patent-pending technology automatically filters the rows of data with essential information. This process makes data analytics faster and more efficient, especially with the parallel processing capability of GPUs. Brytlyt's high-performance GPUs make the complex extract, transform, and load (ETL) process simple and fast, whereas the platform's advanced machine learning capabilities add significant value to the data processing technique while eliminating disparate processes.

Furthermore, while BrytlytDB accelerates data analysis, the company's visualization tool, SpotLyt, provides highly interactive geospatial mapping, in addition to typical data visualizations, such as bar charts, line charts, and heat maps. Unlike competing solutions, Brytlyt's platform automatically captures and manages user behavior to change the graphics on dashboards dynamically. Moreover, the platform uses stored procedures that provide significant flexibility, allowing users to work with the data dynamically and interactively.

Application Diversity

Brytlyt's GPU-powered database and analytics platform can serve customers of all sizes across various industries, such as the following:

Telecom: With increasing competition in the telecom space, communications service providers (CSPs) are struggling to grow. To be competitive, CSPs need to have robust customer data-driven business models because they have huge volumes of unutilized data available. Brytlyt's GPU-powered database and analytics platform helps CSPs uncover the full potential of raw customer data. The platform generates insights within milliseconds to help CSPs understand customers' requirements and improve the customer experience. Furthermore, with the emergence of 5G, GPU-accelerated analytics provides high levels of

streaming, geospatial mapping, and machine learning to enable massive amounts of data to be analyzed and represented in an easy-to-understand way in real time. This accelerated data analysis technique allows strategic decision makers in the telecom sector to query large datasets easily, which was previously not possible with traditional technologies.

Retail: Similar to CSPs in the telecom space, retailers are finding it increasingly challenging to meet dynamically changing customer needs and finding it especially difficult to understand fluctuating sales cycles. Retailers are using Brytlyt's platform to target new customers and retain existing customers through effective pricing and promotions. Brytlyt's platform allows retailers to conduct in-depth analysis on customer behavior trends in the shortest possible time, and retail businesses can subsequently generate insights to target their potential customers proactively. The platform's advanced geospatial mapping, powered with GPU acceleration, facilitates the quick customization of customer data and visualizations, enabling the fast understanding of purchasing behavior. With detailed insights, retailers can create more informed strategic choices to engage customers and improve internal processes, such as promotional campaigns, effective pricing strategies, and inventory management.

In addition to the telecom and retail industries, Brytlyt is targeting customers in finance, oil and gas, healthcare, and logistics.

Financing Performance and Growth Potential

Brytlyt has attracted funding from well-known venture capitalists. To date, the company has raised $4 million in a Series A funding led by Amadeus Capital Partners and Finch Capital. The startup is leveraging these funds to expand its sales and engineering teams, enter new geographies, and engage more customers. Frost & Sullivan research indicates that Brytlyt can potentially make a strong industry impact, especially with a GPU database that works on PostgreSQL and offers high-performance, high-speed, and high-quality visual analytics. With its unique GPU-powered accelerated database and analytics platform, Brytlyt is expected to continue boosting investor confidence.

Brytlyt is driving growth for customers by empowering them with data processing speeds up to 1,000 times faster than legacy systems. The company's platform is available as a cloud offering that allows customers to add or remove GPU resources based on their requirements, thus significantly reducing data processing costs. Brytlyt's GPU-powered database and analytics platform easily fits within businesses' existing systems, saving companies from extensive extra onboarding costs. The platform, therefore, empowers companies to achieve their goals faster, scale up data processing speeds within existing resources, and gain a competitive edge.

Brytlyt has proved to be a driving force behind the growth of accelerated analytics, and customers find the company's solution to be immensely robust in terms of analyzing large data sets.

Conclusion

With rapidly growing volumes of data, traditional databases and analytics solutions that work on CPUs are failing to deliver insights at speed.

UK-based Brytlyt has developed a GPU-powered database and analytics platform that can analyze huge volumes of data in milliseconds. The platform helps enterprises overcome the challenges of traditional analytics systems and offers accelerated, flexible, highly interactive, and easy-to-understand insights and visualizations. Built on PostgreSQL, Brytlyt's platform is compatible with most existing systems and benefits users by enhancing the speed of those systems, without the need to implement new software/solutions.

With its strong overall performance, Brytlyt has earned Frost & Sullivan's 2021 Technology Innovation Leadership Award in the European GPU-powered database and analytics platform industry.

Significance of Technology Innovation Leadership

Technology-rich companies with strong commercialization strategies benefit from the demand for high-quality, technologically innovative products that help shape the brand, resulting in a strong, differentiated market position.

Understanding Technology Innovation Leadership

Technology innovation leadership recognizes companies that lead the development and successful introduction of high-tech solutions to customers' most pressing needs, altering the industry or business landscape in the process. These companies shape the future of technology and its uses. Ultimately, success is measured by the degree to which a technology is leveraged and the impact it has on growing the business.

Key Benchmarking Criteria

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated 2 key factors (Technology Leverage and Business Impact) according to the criteria identified below.

Technology Leverage

    Criterion 1: Commitment to Innovation
    Criterion 2: Commitment to Creativity
    Criterion 3: Technology Incubation
    Criterion 4: Commercialization Success
    Criterion 5: Application Diversity

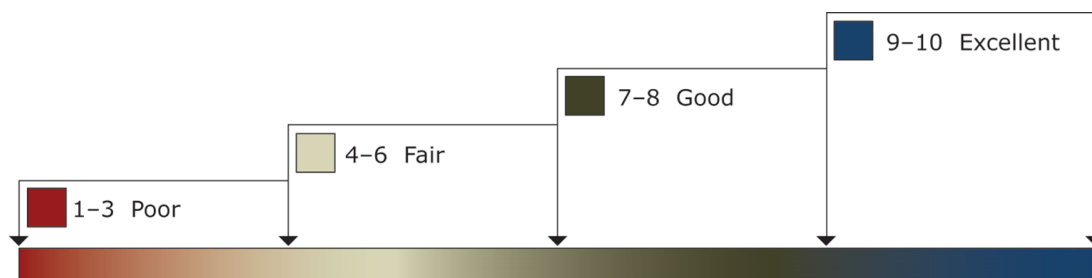**Business Impact**

    Criterion 1: Financial Performance
    Criterion 2: Customer Acquisition
    Criterion 3: Operational Efficiency
    Criterion 4: Growth Potential
    Criterion 5: Human Capital

Best Practices Award Analysis for Brytlyt

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows research and consulting teams to objectively analyze performance according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES

9–10 Excellent
7–8 Good
4–6 Fair
1–3 Poor

The Decision Support Scorecard considers Technology Leverage and Business Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, Frost & Sullivan has chosen to refer to the other key participants as Competitor 1 and Competitor 2.

Measurement of 1–10 (1 = poor; 10 = excellent)			
Technology Innovation Leadership	Technology Leverage	Business Impact	**Average Rating**
Brytlyt	**9**	**9.5**	**9.25**
Competitor 1	8	7	7.5
Competitor 2	7	6.5	6.75

Technology Leverage

Criterion 1: Commitment to Innovation
Requirement: Conscious, ongoing development of an organization's culture that supports the pursuit of groundbreaking ideas through the leverage of technology.

Criterion 2: Commitment to Creativity
Requirement: Employees rewarded for pushing the limits of form and function by integrating the latest technologies to enhance products.

Criterion 3: Technology Incubation
Requirement: A structured process with adequate investment to incubate new technologies developed internally or through strategic partnerships.

Criterion 4: Commercialization Success
Requirement: A proven track record of commercializing new technologies by enabling new products and/or through licensing strategies.

Criterion 5: Application Diversity
Requirement: The development of technologies that serve multiple products, multiple applications, and multiple user environments.

Business Impact

Criterion 1: Financial Performance
Requirement: Overall financial performance is strong in terms of revenue, revenue growth, operating margin, and other key financial metrics.

Criterion 2: Customer Acquisition
Requirement: Overall technology strength enables acquisition of new customers, even as it enhances retention of current customers.

Criterion 3: Operational Efficiency
Requirement: Staff is able to perform assigned tasks productively, quickly, and to a high quality standard.
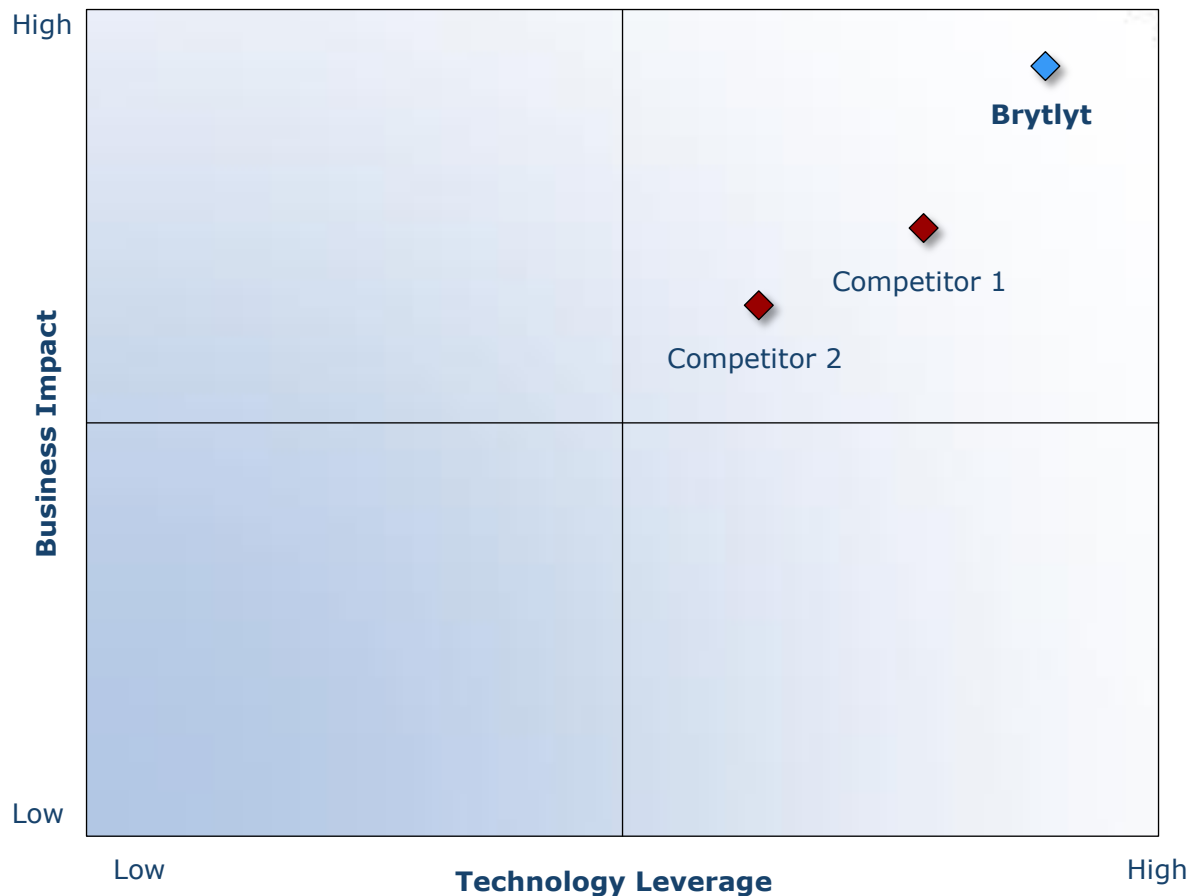
Criterion 4: Growth Potential

Requirements: Technology focus strengthens brand, reinforces customer loyalty, and enhances growth potential.

Criterion 5: Human Capital

Requirement: Company culture is characterized by a strong commitment to customer impact through technology leverage, which enhances employee morale and retention.

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate award candidates and assess their fit with select best practices criteria. The reputation and integrity of the awards are based on close adherence to this process.

STEP		OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	Monitor, target, and screen	Identify award recipient candidates from around the world	• Conduct in-depth industry research • Identify emerging industries • Scan multiple regions	Pipeline of candidates that potentially meet all best practices criteria
2	Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best practices criteria • Rank all candidates	Matrix positioning of all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	• Confirm best practices criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best practices positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized award candidates
6	Conduct global industry review	Build consensus on award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible award candidates, representing success stories worldwide
7	Perform quality check	Develop official award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	Reconnect with panel of industry experts	Finalize the selection of the best practices award recipient	• Review analysis with panel • Build consensus • Select recipient	Decision on which company performs best against all best practices criteria
9	Communicate recognition	Inform award recipient of recognition	• Announce award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of award and plan for how recipient can use the award to enhance the brand
10	Take strategic action	Upon licensing, company is able to share award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess award's role in strategic planning	Widespread awareness of recipient's award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients accelerate growth and achieve best-in-class positions in growth, innovation, and leadership. The company's Growth Partnership Service provides the CEO and the CEO's growth team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit http://www.frost.com.