Omniscope Evo 2023 Whitepaper

1. Background and Overview of Omniscope Evo

Omniscope Evo is a unified data processing, analytics, and reporting application that empowers users to efficiently transform data into actionable insights. This all-in-one tool is specifically designed to enable organisations to seamlessly load, prepare, and analyse their data, ensuring effective data management and analysis.

It's a complete no-code data tool with a fresh and modern UI, still extensible: users can augment workflows with custom Python / R scripts and enhance reports with any JS based visualisation. Its key features also include collaborative tools that allow team members to work together on the same project, customise and distribute interactive reports, and automate data transformation and publishing processes.

Omniscope Evo is a web application that can be either installed as a local app on your computer, or centrally on a server in your organisation, making it accessible from any device, anywhere. It can run on Windows, Linux and Mac operating systems. Cloud-based installation involves setting up the software on a cloud server, which can be accessed by users from any location with an internet connection. This option offers the benefit of easy scalability, as additional resources can be added as needed to accommodate growing data volumes or user demand.

2. Omniscope Evo Main Features

2.1. Data Integration

Omniscope Evo enables users to seamlessly integrate data from various sources, such as databases, spreadsheets, connectors, and cloud-based applications. The intuitive drag-and-drop interface makes it easy to connect and import data. It also supports live connections for real-time data updates.

2.2. Data Transformation

With Omniscope Evo, users have access to a wide range of data transformation capabilities. The software allows easy data cleaning and preparation, and offers built-in functions for data wrangling. Users can also leverage scripting to write custom Python / R code for data transformation or statistical analysis.

2.3. Data Exploration and Analysis

Omniscope Evo provides a comprehensive suite of tools for data exploration and analysis. Users can visualise their data using diverse interactive charts, graphs, and maps. Pivot tables enable data summarization and aggregation. Filters and calculations can be applied to drill down the data and gain deeper insights.

2.4. Collaborative Analytics

Omniscope Evo supports simultaneous collaboration among team members on projects involving data transformation, analysis, and visualisation. Editable dashboards can be shared, allowing team members to identify data anomalies, share insights, and preserve drill-down filter states.

2.5. Data Analytics Capabilities

Omniscope Evo empowers users to visualise and analyse their data, identifying trends and patterns for informed decision-making. It bundles native analytics routines, like clustering, regression, A/B testing, while enabling integration of R and Python for advanced analytics.

2.6. Automated Reporting

Omniscope Evo Scheduler application provides advanced features for automated reporting. With this tool, users can fully automate report updates, eliminating the need for analysts to manually initiate the refresh process. This ensures that web dashboards consumed by users are always available and display the most up-to-date data.

2.7. Security and Governance

To ensure data security and access control, Omniscope Evo provides advanced security and governance features. It supports data encryption, access controls, and user permissions to protect sensitive data. Logging features track projects and reports access history.

2.8. Data Quality

Omniscope Evo allows users to define multiple data validation rules and automate transformation processes in a unified environment. The data workflow logic ensures consistent and transparent data transformation, including validation of data schema and content. This enhances the reliability of results for decision-making.

2.9. Machine Learning

Omniscope Evo supports machine learning capabilities, enabling users to build predictive models and make data-driven decisions. It offers a range of machine learning algorithms, such as decision trees, neural networks, and support vector machines. Users can train, test, and integrate these models into their workflows.

3. Target Audience

Omniscope is a user-friendly tool that doesn't require coding skills and can be mastered in a matter of days, making it an ideal choice for the entire data analyst community. Users of all skill levels can freely explore their data, gain insights, and share findings without relying on experts. The platform also includes advanced analytics libraries, allowing users to apply sophisticated statistical modules with or without coding.

In addition, Omniscope's integration with R and Python, as well as with Github and Docker, makes it a preferred tool for data scientists. They can take advantage of the transparent schematic data preparation tools for automating data preparation and quickly diagnosing anomalies. Furthermore, data scientists can seamlessly integrate their own code for advanced analytics, enhancing the flexibility and power of their analyses.

4. Omniscope Use Cases: Industries and Sectors Served

Visokio's Omniscope Evo provides a versatile data visualisation and analytics solution that can benefit organisations across a broad range of sectors. Whether your organisation is in healthcare, finance, retail, government, or any other sector, Omniscope Evo can help you unlock the power of your data. Whether you are seeking to improve patient outcomes, make informed investment decisions, optimise inventory management, inform data-driven policy

decisions, or any other application, Omniscope Evo provides the tools and flexibility needed to build a custom solution in-house.

Omniscope Evo can be used in a wide range of industries and applications, including:

4.1 Finance and Banking

Omniscope Evo can be used to analyse financial data, including market trends, portfolio performance, and risk analysis. The software's data integration capabilities allow users to combine data from multiple sources, including market data feeds and trading systems or automate regular banking transactions reconciliation operations.
https://omniscope.me/Demos/Industry-specific/Banking+reconciliation.iox/r/Dashboard/

4.2 Healthcare

Omniscope Evo can be used to analyse patient data, track healthcare outcomes, and identify trends and patterns in healthcare data. The software's collaborative analytics features allow healthcare teams to work together to improve patient outcomes.
https://public.omniscope.me/Public/Analytics/Survival/Survival+Analysis.iox/r/Report

4.3 Marketing

Omniscope Evo can be used to analyse marketing data, including customer behaviour, demographics, and marketing campaign performance. The software's data visualisation and exploration features allow marketers to gain insights into customer behaviour and make data-driven decisions.

4.4 Retail

Omniscope Evo can be used to analyse sales data, track inventory levels, and identify trends in customer purchasing behaviour. The software's machine learning capabilities can be used to build predictive models to optimise inventory levels and improve sales performance.

4.5 Supply Chain

Omniscope Evo can be used to analyse production data, track inventory levels, monitor equipment performance and map the logistics. The software's machine learning capabilities can be used to advise on the need to restock, predict equipment failures and optimise maintenance schedules.
Demos:
https://omniscope.me/Demos/Industry-specific/Supply+chain+-+Center+of+Gravity+Calculation.iox/r/Interactive/
https://omniscope.me/Demos/Industry-specific/Supply+Management.iox/r/Report

4.6 Energy

Omniscope Evo can be used to analyse energy usage data, track energy consumption, and identify trends in energy usage. The software's data integration capabilities allow users to combine data from multiple sources, including smart metres and energy management systems.
Demo:https://omniscope.me/Demos/Industry-specific/IOT+Smart+Meter+Installations.iox/r/Daily+2/

4.7 Government

Omniscope Evo can be used by government agencies to analyse data related to public services, infrastructure, and public safety. The software's collaborative analytics features allow government teams to work together to improve service delivery and public safety.
Demos:

https://omniscope.me/Demos/Industry-specific/Equipements+et+taxes+habitation.iox/r/Dataviz+Omniscope/
https://omniscope.me/Demos/General/International+aid.iox/r/Visualisation/

4.8 Education

Omniscope Evo can be used by educators to analyse student performance data, track student progress, and identify trends in student behaviour. The software's data visualisation and exploration features allow educators to gain insights into student performance and make data-driven decisions.

4.9 Media

Omniscope Evo can be used by media companies to analyse audience data, track content performance, and identify trends in media consumption. The software's automated reporting features allow media companies to generate reports quickly and easily, enabling them to make data-driven decisions about content creation and distribution.
Demo: https://public.omniscope.me/Public/Templates/Reddit+explorer.iox/r/Reddit+Report/

4.10 Transportation

Omniscope Evo can be used by transportation companies to analyse data related to fleet management, logistics, and supply chain management. The software's data integration capabilities allow users to combine data from multiple sources, including GPS tracking systems, logistics management software or CCTV camera live feed showing the state of the traffic along the delivery routes.
https://public.omniscope.me/Public/TFL+cameras+Live.iox/r/London+CCTV/

4.11 Environmental

Omniscope offers the capability to plot historical data and gather information from sensor devices in near real time. This functionality enables researchers and government agencies to effectively track environmental measurements, including air, water, or ground pollution, and visualise them alongside other relevant factors such as meteorological conditions and event-driven influences.
https://public.omniscope.me/Public/AirQuality/Slovenia.iox/r/Report/
https://omniscope.me/Demos/EU+Water+Quality.iox/r/Report/

5. Emerging Trends and Future Opportunities

As the world becomes increasingly digital and data-driven, there are a number of emerging trends and future opportunities that present exciting possibilities for Omniscope Evo. One of the most significant trends is the emergence of artificial intelligence (AI) and its potential to transform the way we work with data. With each iteration, AI technologies such as natural language processing and machine learning are becoming more sophisticated and capable of automating complex data analysis tasks. At Visokio, we recognize the potential of AI and are exploring possibilities for integrating AI technologies into Omniscope Evo to enhance its capabilities and provide a more seamless user experience. Specifically, we are exploring the possibility of developing an AI-powered virtual assistant that could help data scientists with tasks such as data cleaning, analysis, and visualisation, enabling them to focus on higher-level tasks and insights. As we look to the future, we are committed to staying ahead of the curve and developing innovative solutions that meet the evolving needs of our customers.

6. About us - Visokio

Visokio, founded in 2003 in London, UK, has established itself as a reliable partner for businesses aiming to leverage their data for a competitive advantage. Beyond developing cutting-edge software in-house, Visokio offers a comprehensive suite of services to assist application users. These services include hands-on support, training, and consultancy, ensuring that users receive the necessary guidance and expertise to maximise the value of the software.

7. Competitive Landscape: Overview of the Current Market

In a highly competitive landscape where data visualisation and analytics solutions have traditionally been fragmented and specialised, Omniscope Evo shines as a comprehensive, all-in-one tool that offers end-to-end functionality. While some competitors may concentrate on specific areas like data preparation or visualisation, Evo provides a holistic solution with an unparalleled user experience. It empowers data professionals to seamlessly extract, transform, and load data from any source, enrich it with advanced analytics capabilities, and create interactive visualisations and dynamic dashboards. With its comprehensive feature set and user-friendly interface, Omniscope Evo distinguishes itself as a versatile solution that

caters to all users, addresses various data challenges, and suits organisations of any size or nature.

8. Analysis of Competitors

8.1 Alteryx

Alteryx is a data analytics software platform that helps users to collect, prepare, blend, analyse, and share data.

Omniscope Evo offers a unified solution for end-to-end data handling, surpassing Alteryx in terms of functionality. While both platforms provide drag-and-drop capabilities for data preparation and analytics, Omniscope Evo excels in visualisations. It empowers users to create highly interactive dashboards, allowing them to craft compelling narratives with their data, internally explore specific subsets, and generate reports for external clients.

While Alteryx does offer the capability to create interactive data visualisations, it is important to note that this functionality is limited. Many Alteryx users find themselves exporting data to other packages for visualisation, which not only incurs additional costs but also introduces challenges in terms of data logistics and storage, ultimately impacting the overall user experience.

Alteryx is often considered too expensive for small to medium-sized companies, and the cost is further exacerbated by the need to invest in an additional advanced data visualisation application. This makes Alteryx a costly component in the data management process.

8.2 PowerBI

Microsoft Power BI is a business intelligence tool that helps users to analyse data and create interactive dashboards and reports.

Main features include: Data connectivity, preparation, data analysis, interactive data visualisation and data sharing.

Omniscope's ETL application component provides a significantly more advanced toolbox for creating data schematic preparation pipelines and implementing complex data validation mechanisms. This level of functionality is unmatched by Microsoft's PowerBI, making Omniscope the superior choice for users seeking robust and sophisticated data processing capabilities.

The cost and architecture: Power BI may appear simple and affordable at first, but to go beyond basic visualisations and utilise advanced features, users are required to configure multiple products across desktops, servers, and the cloud. This results in increased costs and ongoing maintenance. Report development and data modelling in Power BI involve downloading and maintaining separate tools on desktops or laptops, and integrations such as on-premises data can require an unreliable data gateway. Additionally, running BI on the cloud is limited to Azure, locking users into that specific platform.

Self-service limitation: With Power BI, users need to know DAX, M, MDX and SQL programming – well beyond the skill set of most non-technical users.

8.3 Tableau

Tableau is a business intelligence and analytics platform that can be used to analyse data, create interactive dashboards and reports, and share insights with others. It is renowned for its robust data visualisation capabilities.

The cost of full solution: To get Tableau up and running, and to cover the complete process of scheduled data ingestion, transformation, visualisation and report sharing - the users need to configure several products across desktop and servers or cloud, which can be complex and costly. Omniscope's commercial plans provide a flexible combination of features that can be tailored to meet the needs of any company. Even the most basic plan includes essential functionality for data extraction, preparation, visualisation, and analysis.

Due to the limitations of Tableau Prep application, many companies choose to invest in third-party data transformation tools to meet their specific needs. In contrast, Omniscope Evo's ETL capability surpasses Tableau Prep by offering a wider range of features and advanced data preparation tools, all seamlessly integrated into a comprehensive "all-in-one" application.

9 Advantages of Omniscope Evo over competitors

App completeness: Omniscope is an all-in-one solution that offers strong data preparation, analytics, and reporting capabilities in a single platform. This makes it easier for businesses to streamline their data analysis workflows and reduce their reliance on multiple tools.

Easy-to-Use modern interface: Omniscope offers a modern user-friendly interface with intuitive drag-and-drop functionality, making it easier for users of all skill levels to work with data and generate insights. This is particularly beneficial for businesses that don't have dedicated data teams or data scientists.

Unique personal support: the application support **is offered directly by the creators of the platform.** Apart from online documentation, video tutorials, user forums, Visokio, the team behind Omniscope, provides comprehensive direct support to its users. The support team recognizes that every business has its unique set of needs, which is why they work closely with customers to build customised solutions. With their expertise in best practices and extensive experience in troubleshooting issues, the support team is committed to providing customers with the best possible experience. This ensures that businesses using Omniscope have access to the resources they need to continue to maintain and enhance the solution in a true self-service environment.

Clear total cost of ownership (**TCO**) for Omniscope is transparent, as even the basic commercial plans provide users with all the necessary tools for data management operations. Scaling up and accommodating more users is straightforward, with clear cost per user seat or server node, making it easy to plan and budget accordingly. The application also offers usage dashboards that visualise server log files, enabling administrators to monitor capacity utilisation and determine if an upgrade is necessary.