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Different Analytical Tools

**In your table, include 2 to 3 bullet points in the strengths and weaknesses column for each product. In the “Best Used” row, describe how the particular product is best used. Feel free to add rows for additional tools you wish to consider.**

**Below the table, include a reflection that includes your assessment of the tools and what you would consider to be a good fit for meeting your needs as a data analytics professional. Consider how your findings incorporate your professional goals.**

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| **Analytical Tool** | **Strenghts and Weaknesses** | **Best Used** |
| Incorta | * Delivers high-performance data analytics. * Connectivity to over 240 data sources and the “revolutionary Direct Data Mapping™ technology.” * Allows sensitive data to be analyzed safely and complies with GDPR and CCPA requirements. * Has issues with integrating third-party apps. | The manufacturing and technology industries benefit most from this tool, specifically Broadcom and Shutterfly. Data is delivered in minutes, can be easily explored and analyzed in any direction, and can quickly identify trends within minutes. |
| MicroStrategy | * Provides business intelligence and services through mobile or the cloud. * Designed for any sized database * Centralized, automated security, any security provider. * Does have issues with the user interface for end users to interact with reports. | Industries such as retail, healthcare, finance, and the public sector would benefit from this tool. Data can be used to access products and performance at retail stores, ensures regulatory compliance, and optimizes supply chains. |
| Pyramid Analytics | * Provides a data analytics platform that enables non-technical people to analyze data and make intelligent decisions in a fast-paced approach. * Can build interactive analysis within minutes, yet this can be a complicated task. | The healthcare industry would benefit from this tool. Healthcare organizations want sophisticated data simplistically presented to them. Tasks such as decision-making and expanding insights to all departments of a hospital system benefit this industry. |
| Google (Looker) | * Create custom apps that deliver data experiences as unique as your business. * Enhance the tools you’re already using by infusing new, relevant data. * It can support multiple data sources and deployment methods, providing options that would not compromise transparency, security, or privacy. * Poor data visualization may not be user-friendly for some analysts. | Looker is best used in the media and entertainment industries, specifically MLB and FOX. The process of gathering data and insights is 2-3 times faster. |
| Domo | * Connect, combine, and transform data from cloud systems, cloud data warehouses, on-premises, and legacy systems. * Product in compliance with GDPR, HIPAA, SOC 1/2, and ISO standards. * Not powerful past ETLs. Does not have actual API interaction from DDX bricks. | This tool would benefit the communications, financial services, healthcare, high-tech, manufacturing, and media industries. Domo can deliver deep insights, create unlimited dashboards for any purpose, and save time on completing tasks. |
| Amazon Web Services | * Has the most serverless cloud data analytics options, including data warehousing, big data analytics, real-time data, data integration, and more. * Lets users define and manage their security, governance, and auditing policies to satisfy industry and geography-specific regulations. * It can be challenging to install. * It Can be time-consuming to do operations on a stack. | This tool would benefit the communications, financial services, healthcare, high-tech, manufacturing, and media industries. Reduces costs for many companies, such as Salesforce and Pinterest, by upwards of 50% regarding processing data. |
| Alibaba Cloud | * It can back up large amounts of data and, in turn, operate seamlessly during busy times. * It can help prevent data loss with effective control over the permissions on storage and transmission products on the cloud. * Using this service can be costly. | The IT and CS industries would benefit most from this type of tool. Alibaba Cloud ECS guarantees 99.995% availability and can be scaled to accommodate traffic spikes. |
| Zoho | * Can hold conversations with the intelligent AI assistant, generate automated insights with a single click, predict future trends, and do cognitive analysis. * Built-in accredited enterprise-grade security features and governance framework. * ETLs are not advanced. | This tool would benefit the communications, financial services, healthcare, high-tech, manufacturing, and media industries. Predictive and what-if analysis and data alerts generated are tasks that Zoho can accomplish. |
| TIBCO Software | * It’s recommendations engine automatically IDs the most intriguing patterns in your data, providing guidance for deeper exploration in seconds. * Drill down or across multi-layer, disparate data sources with fully brush-linked, responsive visualizations. * This tool does not show how they incorporate data security. | Biotechnology and natural resource industries would benefit most from this type of tool. Decisions can be made using real-time, data-driven intelligence with the ability to view visual analytics using TIBCO Hyperconverged Analytics. |
| IBM Cognos | * Can Accelerate data prep with AI * Can combine advanced analytics and data science into daily operations and seize new opportunities. * Self-service analytics prevents data misuse. * Can handle large amounts of data. * Unavailable to download reports as interactive PDFs and other file formats. | This tool would benefit the communications, financial services, healthcare, high-tech, manufacturing, and media industries. Utilizing IBM Watson, a well-known AI machine, is unique among other analytical tools. With AI, one can automate data exploration, uncover hidden trends, and deliver insights automatically. |
| Yellowfin | * Can extend the dashboards with operational workflows and operationalize data science models so users can take action within the dashboard. * It can connect to any data size via a web API. * Security can be configured with a choice of either/or a user, role, group, content, function, and data level security model. * Customization is complex and confusing. | This tool would benefit the communications, financial services, healthcare, high-tech, manufacturing, and media industries. Tasks such as finding patterns, writing reports, and presenting findings are easily accomplished with compelling dashboards and data stories created using the Yellowfin platform. |
| Tellius | * Can cleanse data, combine from disparate sources, transform data, and set up data pipelines for automated processing. * Quickly uncovers essential findings in your data with embedded machine learning. * Can identify fraudulent activity within the datasets. * Data dashboards are not as flexible. | The financial services, pharmaceutical, e-commerce, healthcare, communications, and insurance industries would benefit most from this tool. Industries that use Tellius will likely cut operating expenses over the next couple of years and improve customer and patient experience. |
| SAS | * Fully integrated, open source, cloud-native technology platform. * Produces outcomes that are repeatable, reliable, explainable, and compliant. * Allows analysts to access and integrate data from virtually any source. | This tool would benefit the communications, financial services, healthcare, and manufacturing industries. These industries would gather data and create products that save production costs. |
| SAP | * Can integrate and orchestrate massive data volumes and streams at scale. * This tool does not show how they incorporate data security. * The interface does lack occasional improvements. | Any industry would benefit most when using this type of tool. This can be used to gather data for greater efficiency and day-to-day planning. |
| Oracle | * Uses the latest data analytics technologies, such as AI, machine learning, and natural language processing. * Centralizes the reports and dashboard. * Saves time and effort in the decision-making process. * Backing up and recovering data is time-consuming. | The manufacturing, IT, healthcare, professional services, wholesale, and financial services industries would benefit most from using this type of tool. This tool can use data collection and finding patterns to support business expansion. |
| Sisense | * Analyze, explore, and collaborate with or without code to uncover powerful insights. * Augment every analysis with predictive analytics and machine learning * Data can be connected from anywhere * This tool does not show how they incorporate data security. * Creating dashboards can be time-consuming; it takes a long time to load. | The healthcare, manufacturing, retail, tech, pharmaceutical, and financial services industries would benefit from using this type of tool. Collecting and presenting data would be best suited for this tool. |
| ThoughtSpot | * The backlog is reduced by over 80%. * Can connect to data quickly, make insights easily discoverable, and balance data access with granular column and row-level controls. * Inherits pass-through security and certified master data assets from any cloud data warehouse. * Customization of the dashboards is limited. | The banking, financial services, retail, manufacturing, healthcare, media, and public sector would benefit most from this tool. Storing data with ThoughtSpot comes with maximized efficiency and increased productivity among employees. |
| Qlik | * AI-generated analyses and insights. * Automated creation and data prep. * Machine learning & predictive analytics. * The development model follows an adapted Scaled Agile Framework (SAFe) implementation. * All of its features need to be purchased. | The finance, HR, IT, marketing, and sales industries would benefit most from this tool. With Qlik, an analyst can develop highly flexible data simulations to make the best changes for an organization. |
| Salesforce (Tableau) | * It can automatically analyze any-sized data. * Comes with AI to make intelligent predictions and recommendations. * Data is secured via visibility and other control settings. * Using this tool may be hard to learn and comprehend to use. * Transferring large files can be time-consuming. | Any industry would benefit from this type of tool. Efficiency and productivity for many organizations have increased when using this tool. |
| Microsoft | * Meaningful insights are produced with hundreds of data visualizations. * Security features include sensitivity labeling, end-to-end encryption, and real-time access monitoring. * It can be hard to use for beginners in data analytics. | Any industry would benefit from this type of tool. The most crucial task that organizations benefit from is the ability to generate metrics within a short time. |

I don’t have a specific professional industry that I am interested in working in. However, I don’t want to work in an industry that does not integrate AI into any form of data analytics. I discovered that AI is a new tool integrated into decision-making with each of these products. The ability to utilize AI to make concrete decisions for an organization’s future instead of a group of executives. Microsoft’s data analytic product Power BI describes that analysts can use AI to “help non-data scientists prepare data, build machine learning models, and find insights quickly from structured and unstructured data, including text and images. (“Why Microsoft Power BI,” n.d.). As the role of a typical data analyst is to discover insights manually, AI can be used to automatically discover all data insights, including ones that are undiscovered. This helps to ensure that all possible decisions to assist the day-to-day operations are brought forward and acknowledged. I believe more information should be added to different data analytic tools offered by the same company. Comparing each device to determine the most automation and efficiency to an organization could be added. However, each of these companies builds their data analysis tools based on different characteristics that may benefit a single organization depending on their tool.

**References**

*Why Microsoft Power BI*. Why Power BI - Features & Benefits | Microsoft Power BI. (n.d.). Retrieved February 9, 2023, from <https://powerbi.microsoft.com/en-us/why-power-bi/>