**Course Project -** [**Which Analytics Applications Work for Our Company?**](https://learning.rasmussen.edu/webapps/assignment/uploadAssignment?content_id=_5882924_1&course_id=_65722_1&group_id=&mode=view)

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Based on the requirements allocations of XYZ company play put together an offer outlining for high-level analytic and data platforms. To begin implementation and turning the XYZ company into a data-driven force to be reckoned with.

You will find below that it outlines four major platforms including their specifications. Followed by specific recommendations and summary to facilitate the needs of XYZ company  moving forward.

These are the four companies that I like to bring your attention to. These companies can provide and facilitate full analytic Provisions. Being at XYZ Healthcare has No initial or known resources or adapted technologies in place, these are companies would be worth mentioning.

**Analytics platforms for XYZ healthcare**

1. *Microsoft Azure & Power BI*
2. *Sisense*
3. *Tableau*
4. *Amazon AWS & QuickSight*

These are the four analytics tools & companies that I like to bring your attention to. These companies can provide and facilitate full analytic Provisions. Being at XYZ Healthcare has No initial or known resources or adapted technologies in place these are companies would be worth mention.

**Microsoft**

Microsoft is a trusted and familiar brand the Power BI is a cloud-based intelligence service Suite by Microsoft used to convert raw data meaningful information for visualization of business analytics. Microsoft has a platform dedicated to the health and life science Industries with Azure Health Cloud. Which is transforming industries with Big Data Solutions. There is some complexity from IT, development, extraction, and storage standpoint; but Power BI is an easy drag and drop interface that does not require high technical skills. Power Bi can connect to multiple sources of storage and data types for easy visualization.*( DataFlair, 2019) (TechAffinity, 2018*)

**Pro's**

* Affordable
* Microsoft Brand integration
* Consistent upgrades
* Easy integration with Excel
* Availability of huge learning resources and active community
* Good report visualization
* Extensive Database connectivity
* Enhanced Collaboration

**Cons**

* It can be complex
* Configuration of Visuals
* crowded interface
* Ridged formulas

**Tableau**

Tableau is a data visualization tool that can change the raw data into an understandable format without the requirements of the coding and technical skills. The data analysis is very fast, and visualizations can be done in worksheets or dashboards. It can be used to provide actionable insights to creates quick dashboards. *(Absent Data, n.d)*

**Pro's**

* Data Blending.
* No need of technical knowledge.
* Real-time analysis.
* Data Collaboration.
* DAX Analysis function.
* Ease of Implementation.
* Tableau can handle large amounts of data.
* Mobile Support and Responsive Dashboard.

**Cons**

* Scheduling or notification of reports Tableau does not provide the feature of automatic refreshing of the reports.
* No Custom Visual Imports.
* Tableau’s conditional formatting and limited 16 column table displays are pain points for users.
* Parameters are static and always single value can be selected using a parameter .
* Limited Data Preprocessing.
* Scaling and Pricing for Enterprise is very expensive.

**Sisense**

It is an easily affordable business intelligence (BI) analytics platform. With easy simple drag-and-drop interface and scalable end-to-end BI processes that help to prepare, analyze, and visualize multiple complex datasets quickly. It handles complex queries without programming or SQL, removes and data size limitations, handles data at scale, and can be used in the house. *(Finances Online, n.d)*

**Pro's**

* Eye-grabbing visualization.
* Exports data to PDF, Excel, Images, CSV and other formats.
* Enables to deliver interactive terabyte-scale analytics.
* Embed entire dashboards or individual widgets.
* Intuitive ‘script-less’ user interface.
* Drag-and-drop user interface.
* Data unification.
* Data mashups

**Cons**

* There are a few areas where the vendor can focus on improving the product and make it even more effective.
* There could be a simpler way for admins to share dashboards created by multiple users.
* The navigation and filtering on the mobile platform could be improved.
* They do not provide the infrastructure, storage, and resources for full ETL.

**Amazon AWS & QuickSight BI**

Amazon QuickSight is fast, cloud-powered business intelligence that runs on a serverless environment. having the capability of displaying and computation. QuickSight lets you easily create and publish interactive dashboards that include ML Insights. Dashboards can then be accessed from any device and embedded into your company’s existing applications, portals, and websites. It has a pay per session pricing tier making it affordable while being support by AWS cloud infrastructure. Which facilitates many other tools & platforms for storage resources extracting loading transforming analyzing data. Amazon has become a trusted familiar brand and delivers on results of quality speed and diversity to scale quickly in any data-driven environment. Amazon facilitates specific initiatives for the health and life science industries. AWS offers solutions to help Healthcare and Life Sciences organizations protect, analyze, and gain valuable insights from data through artificial intelligence (AI) and machine learning (ML) technologies. A great solution for organizations with loads of data ether starting or pre-existing data solutions.*(Trust Radius, n.d) (Amazon AWS,2019)*

**Pro's**

* Easily to set up for data sources, already supports quite a few of AWS and non-AWS data sources
* Cost friendly since users are charged only for the basis of usage
* Its integration into other AWS Services is one of its most appealing features.
* Lightweight and serverless BI tool that can be used for niche dashboards.
* Amazon QuickSight is a really easy program to learn how to use.
* Even though our organization has different reports built for different departments, each department can still access and understand reports from across the company.

**Cons**

* Still limited options for a different type of graphs/charts. If possible, with extension or API to customize the visualization would be better.
* Mainly supports the rendering for large screen device/PC/laptop, not auto-layout properly in small mobile device.
* Reports only update every 24 hours
* Is new and not as established as other BI tools
* Still has some bugs

**Analytics Recommendation Conclusion**

Based on the given above information my recommendation for XYZ Healthcare would be to go with Microsoft Azure and Power BI. Not knowing the extent of data and resources allocated or collected of historical data value. I would have to assume that there is no presumption of business intelligence tools being Incorporated at this time. Microsoft is a trusted company that has a sound platform that is proven. They provide infrastructure with easy-to-use for non-technical people to understand and facilitate a wide variety of ways to integrate analyze complex data. The infrastructure it provides is the main rationale for choosing this platform for a company that is not yet data-driven.

With that being said for cheaper quicker solutions I would recommend tableau this would give the XYZ healthcare industry an easy way to tap into their data and start visualizing it quickly. No, it would not be as efficient in the long run because of the lack of infrastructure.

Amazon AWS and QuickSight would have been my first recommendation if the BI tools weren't so new and where more established. The technology seems to have some bugs and minor issues. The rest of Amazon's AWS offers some of the best tools to develop a sound infrastructure for becoming a data-driven company in facilitating the results XYZ healthcare needs. This was the determining factor for the recommendation.

Microsoft Azure and Power BI can be implemented to quickly transform and give XYZ healthcare quick data analytics that is easy to incorporate while providing sound cloud infrastructure that can be scaled. Also, the infrastructure can be integrated with the other tools mentioned after XYZ healthcare is more established.

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