phuse·virtual

Single Day Event

Importance of Visualizations in the Pharma Industry

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The What and Why of Data Visualization

What

Currently, in the business world, there is a great deal of information collected for data analysis, and we must be able to interpret that information quickly. Putting the information into a visual context via maps or graphs helps us understand what it means. It becomes easier to identify and recognize trends, patterns, and Outliers among large data sets.

Why

1.) With data visualization, data can be delivered in the most efficient manner, irrespective of business domain.

2.) Step of data visualization is vital to the business intelligence process because it takes raw data, models it, as well as delivers data so that conclusions are drawn With the help of artificial intelligence.

3.) Machine learning algorithms are being developed in advanced analytics to compile data into visualizations that are easier to understand and interpret.

4.) With the help of data visualization, businesses are able to access accurate, complex information at a glance, enabling innovative product development and delivering drugs to the market at faster pace. Data can be interpreted and worked more easily with visual storytelling tools.

Reasons Clinical Data Visualization Matters

The ability to access data across multiple databases:

1.) Data can be gathered from multiple database sources throughout a clinical trial.

2.) Business Intelligence and Data Visualization tools make it possible to collect, analyze and visualize data from multiple sources at the same time and make that data easily accessible to all members of the clinical team (data managers, CRAs, statisticians, Investigators, and management).

3.) Drilling down to different levels of details, clicking through to all levels helps to make analysis for specific subpopulations more meaningful.

Real Time Analytics :

1.) The study team can receive real-time alerts when something goes wrong at a specific site or with a particular patient, when any events happen.

2.) A real-time data analysis allows decision makers to identify underperformers (site selection), fix them, and determine whether to continue a study or not.

3.) Data can be visualized anytime, anywhere because of the availability of data visualization tools on portable devices.

Reasons Clinical Data Visualization Matters

Reports and dashboards on as-needed basis:

1.) Clinical trial team can streamline their studies by concentrating on the metrics that matter.

2.) Clinical trial teams can build their own customized dashboards to provide ad hoc reports, such as metric data, safety/efficacy monitoring, and patient management

No Technology Required

1.) Cloud computing has emerged as one of the main techniques for visualizing data. By eliminating HTML and plug-ins, Sponsors are able to use these tools with less effort.

2.)Handheld devices such as smartphones and tablets allow users to access data "on the go.".

Transition from conventional review to modern approach via data visualization methodology

Conventional

Select Certain datasets to analyze

Manualy Analyzed
- Identify Trends
- Analyze only certain datasets
- Only basic charts

Generate Key Insights

Present

Comparision

Modern

Business Intellegence and Data Visualization tools

Advanced Analytics
- Data-view across all parameter
- Flexibility to modify data view
- Immediate Update
- Quick Insights

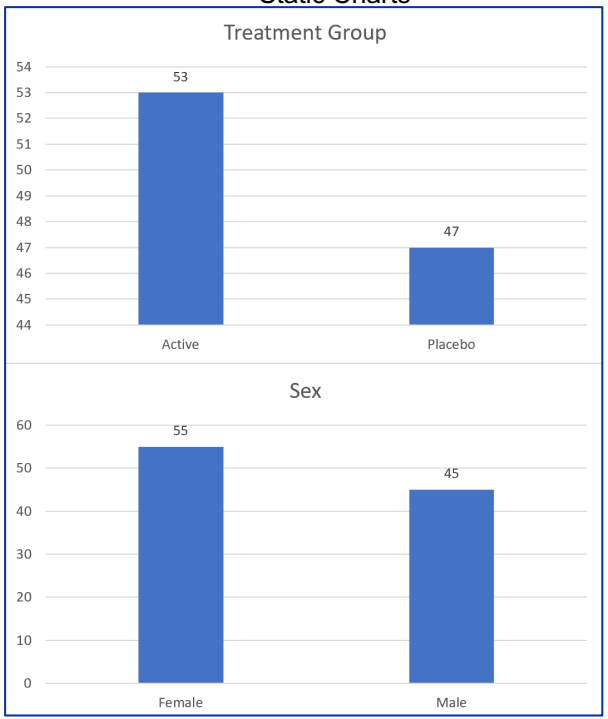
360 degree view of data

Story Telling

Adapting to data visualization tools

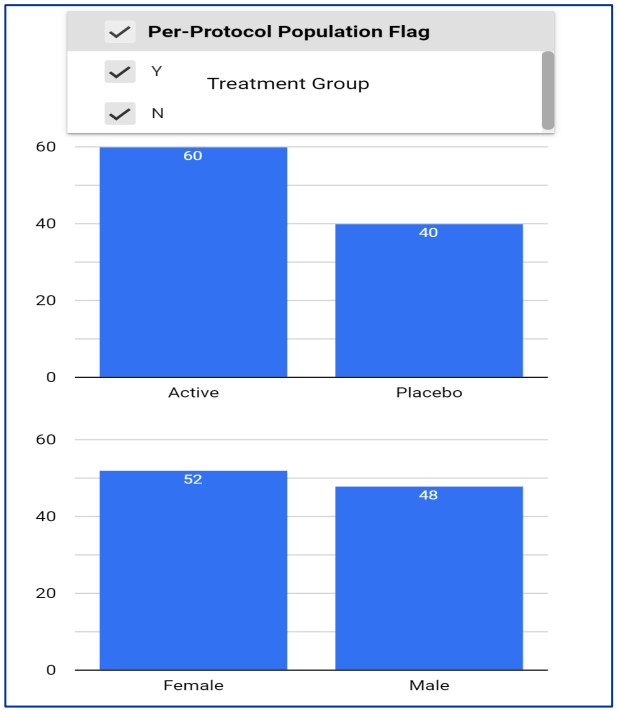
Conventional

Static Charts



Modern

Dynamic Charts with drilled down option



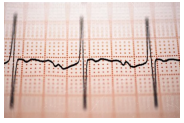
Advantages of Data Visualization

Accelerate drug discovery and development

Optimize and improve efficacy of clinical trials

Target specific patient's populations more effectively

Better insight into patient behavior to improve drug delivery and effectiveness and healthcare outcomes



Improve safety and risk management

Gain improved insight into marketing and sales performance

The Global Healthcare Data Science Community

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