MICROSOFT POWER BI vs TIBCO SPOTFIRE

- Anirudh K, Data Programmer/Analyst

Introduction

Power BI

- Power BI is a suite of business analytics tools that analyzes data and shares insights. It enables users to monitor their business from every device and at any time.

Spotfire

- TIBCO Spotfire products offer a visual and interactive experience that helps professionals quickly discover new and actionable insights in information.

Stack

Power BI

- Power BI Desktop(Analyst)
- Power BI Service (Cloud)
- Power BI Mobile
- Power BI Embedded

Spotfire

- Spotfire Desktop(Analyst)
- Spotfire Webplayer
- Spotfire Server (Cloud or On Premise)

Connectivity

Power BI

- Connect to Excel spreadsheets, on-premise data sources, big data, streaming data, and cloud services: it doesn't matter what type of data you want or where it lives, connect to hundreds of data sources with Power BI.
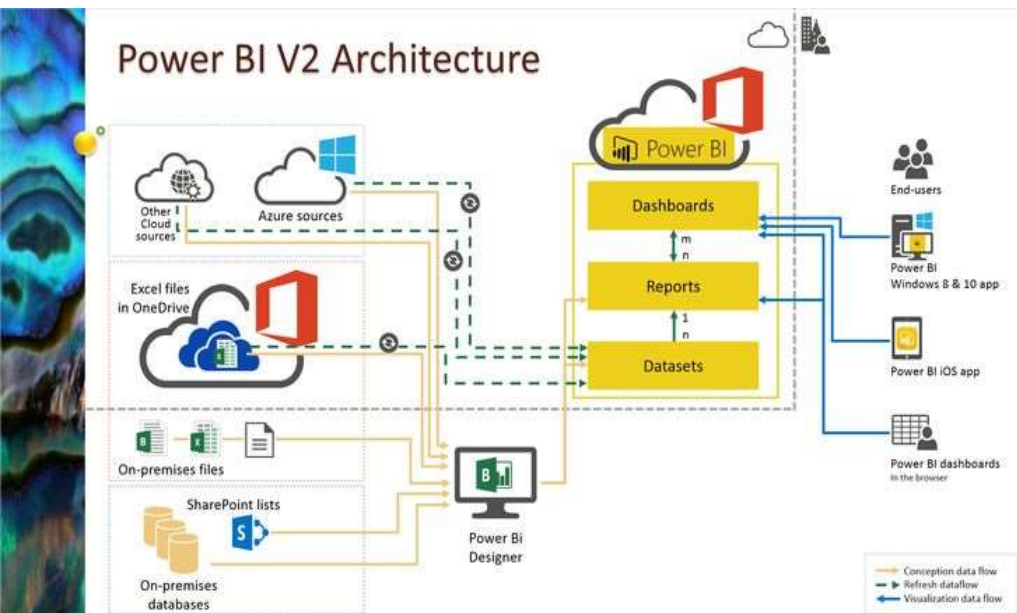

Spotfire

- Spofire provides a wide range of data connectors which allows to either import data and analyze it with the Spotfire data engine or to keep the data in the external system (in-database)

List of Connectors in this Version
- [+] Cubes in Spotfire
- [+] Amazon Redshift
- [+] Apache Spark SQL
- [+] Attivio
- [+] Cisco Information Server
- [+] Cloudera Hive
- [+] Cloudera Impala
- [+] Google Analytics
- [+] Hortonworks
- [+] HP Vertica
- [+] IBM DB2
- [+] IBM Netezza
- [+] Microsoft SQL Server
- [+] Microsoft SQL Server Analysis Servi
- [+] OData
- [+] Oracle
- [+] Oracle Essbase
- [+] Oracle MySQL
- [+] Pivotal Greenplum
- [+] Pivotal HAWQ
- [+] PostgreSQL
- [+] Salesforce.com
- [+] SAP BW
- [+] SAP HANA
- [+] Teradata
- [+] Teradata Aster
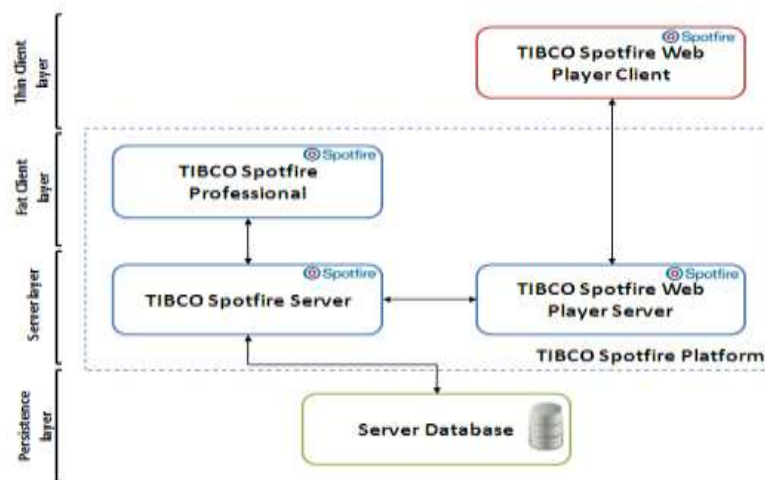
Architecture and Storage

Power BI

- Power BI offers a cloud ready service that is seamless and highly available.

- Provides 10GB of cloud storage for each user, post which data should be managed by deleting the older items.

Spotfire

- TIBCO Spotfire provides robust server that can be deployed on any third party clouds as well as on dedicated infrastructure.

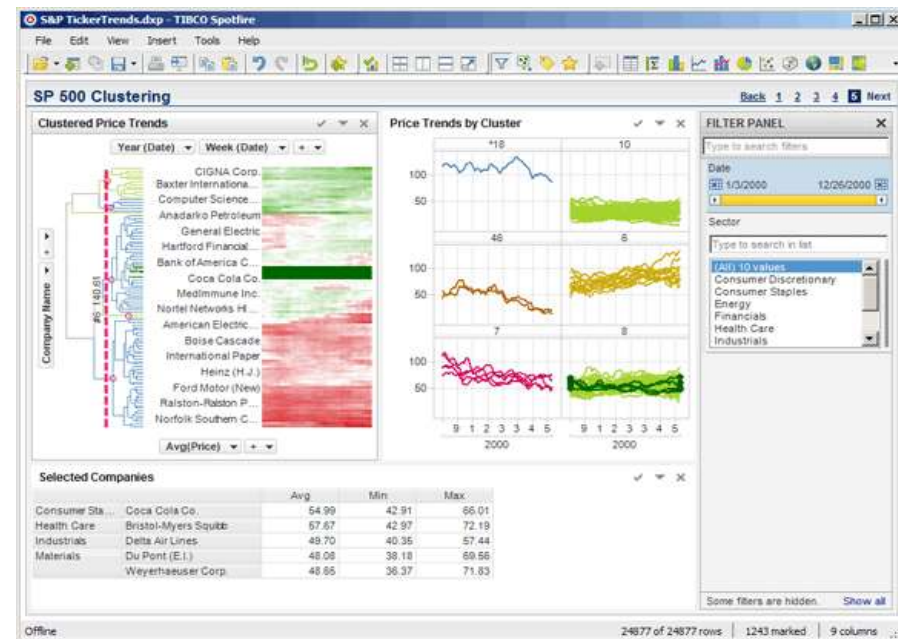- Storage capability solely depends on repository database limits.

Visualization

Power BI

- Provides a unique feature to import custom visuals made from D3, Node and R
- Custom visuals behave similar to native visuals in filtering, slicing and dicing

Spotfire

- Uses visual JavaScript libraries like D3 and Fusion Charts along with Spotfire native visualizations.

- JavaScript visuals boosts 3D visualization capabilities of spotfire.
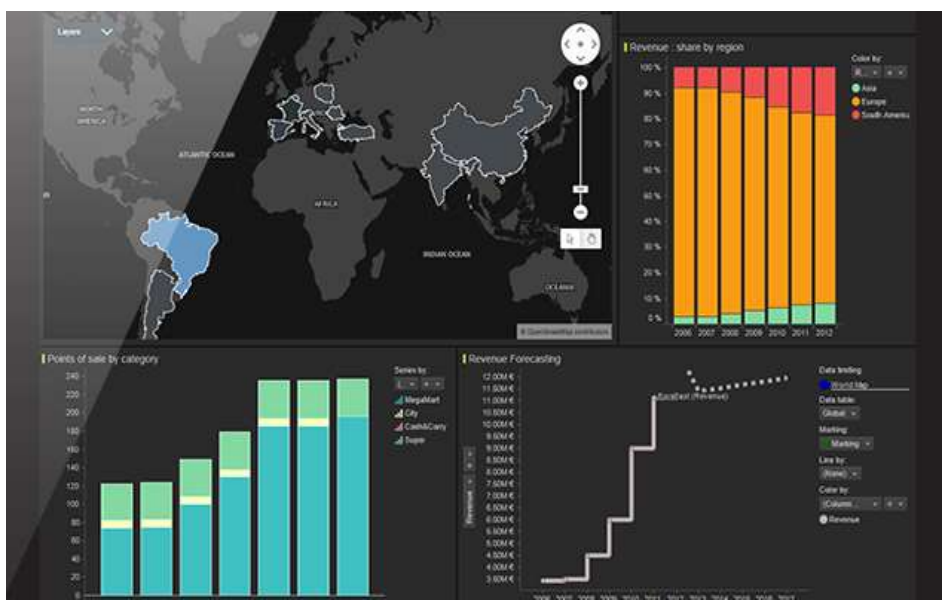
Dashboards

Power BI

- Provides clear and crisp dashboards with eye catching colors
- Dashboards can be formed with ease by direct pinning and resizing of visuals from reports
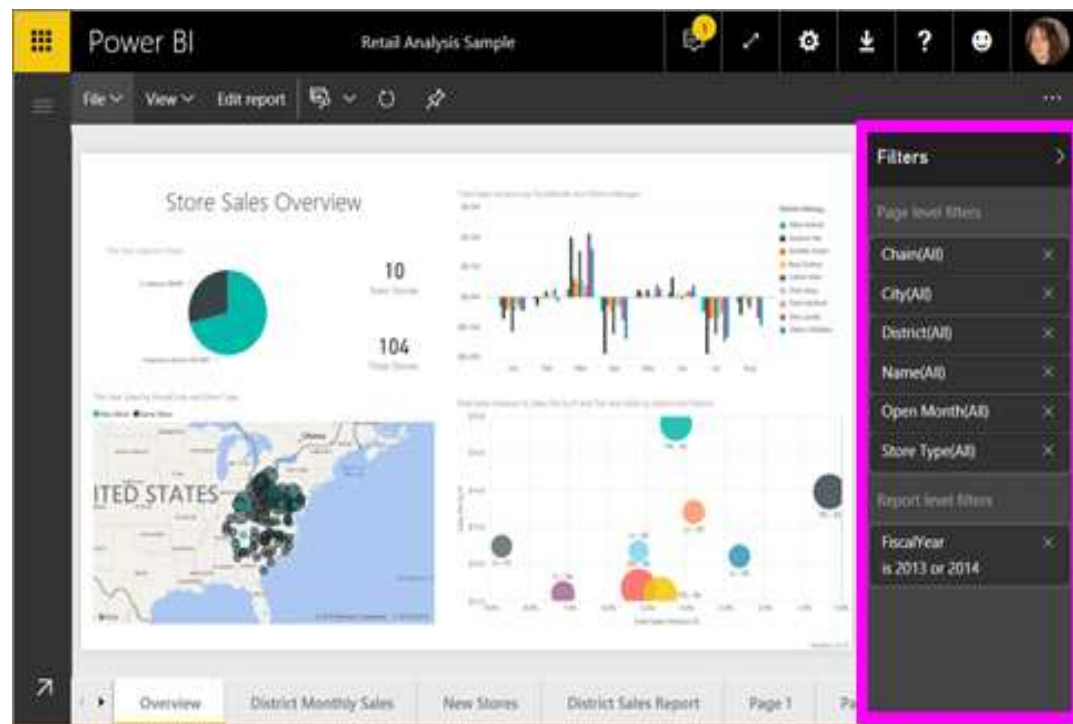
Spotfire

- Rich in creating tabbed reports.
- Ease of swapping the visuals between tabs
- Lacks proper dashboarding capabilities
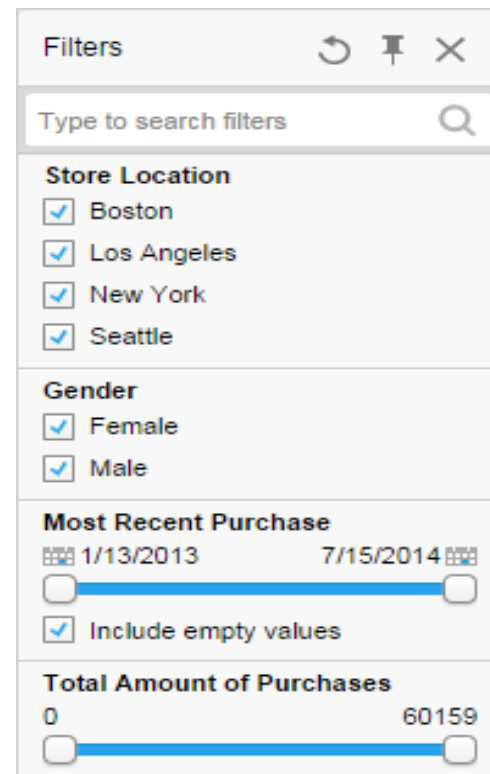
Filtering, Slicing & Dicing

Power BI

- Custom slicers can be created on the fly
- Provides report, page and visualization level filters
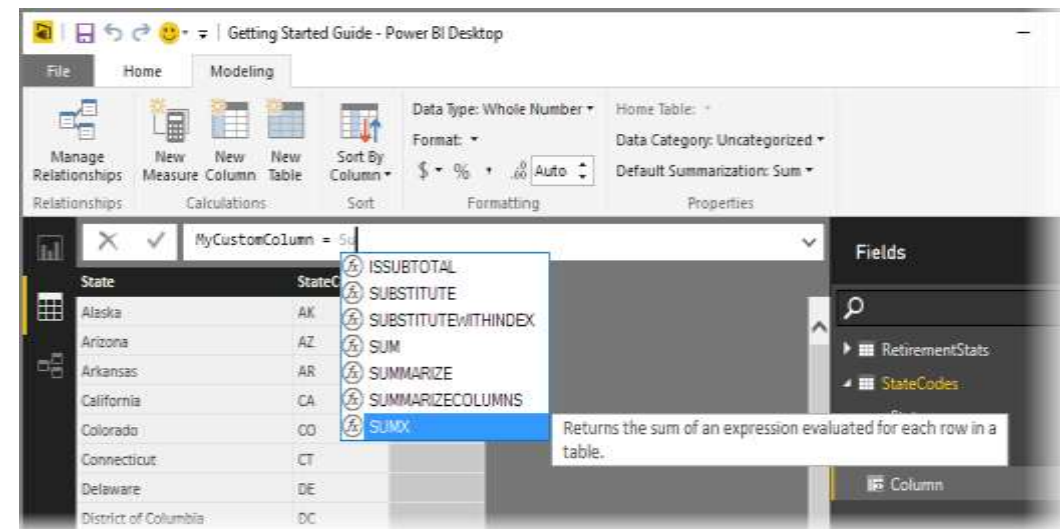
Spotfire

- Encapsulates responsive filters and filter scheme techniques
- Slicing and dicing can be done by creating custom hierarchies
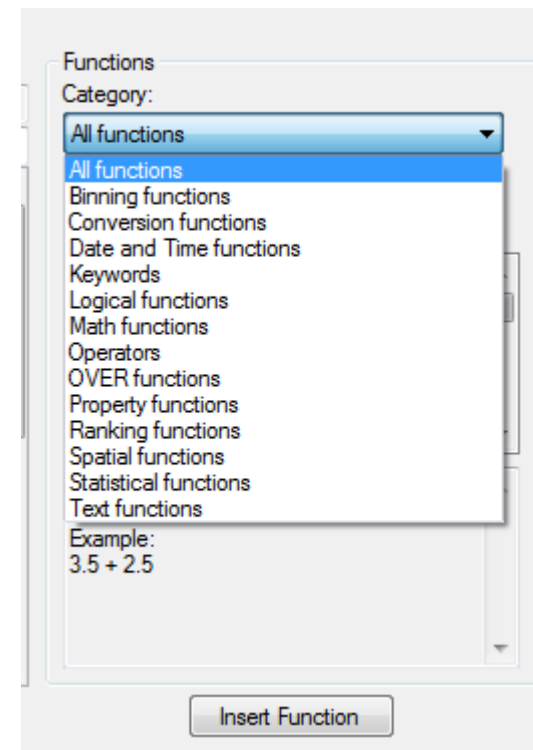
Functions and Expressions

Power BI

- DAX expressions can be used to create calculated fields, new columns, aggregations, changes to data formats and granularity and you can even modify the data in the tables or join tables.
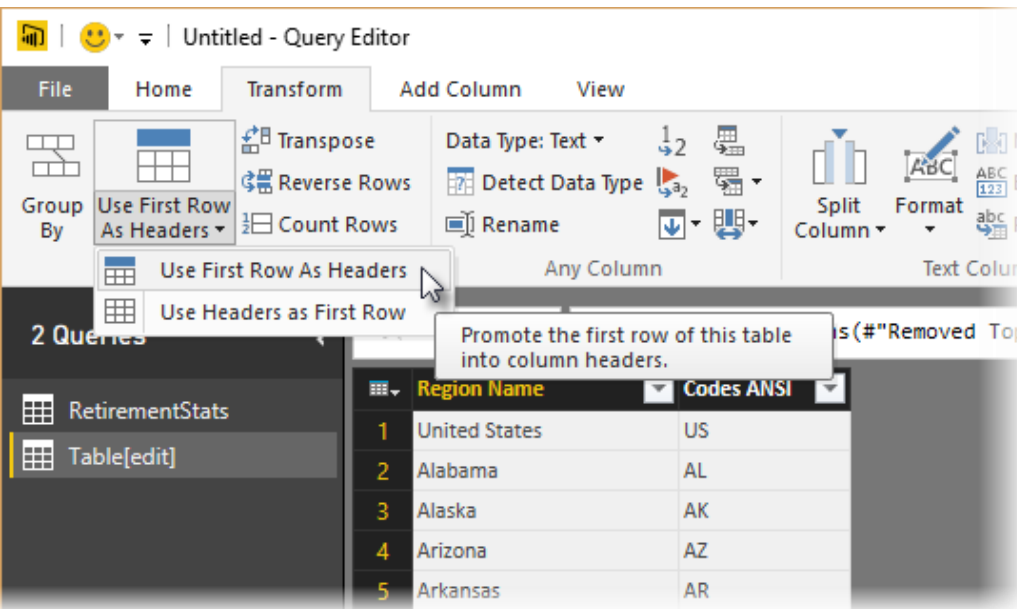
Spotfire

- Spotfire provides a vast and wide variety of built in functions to handle almost all kinds of data manipulations.
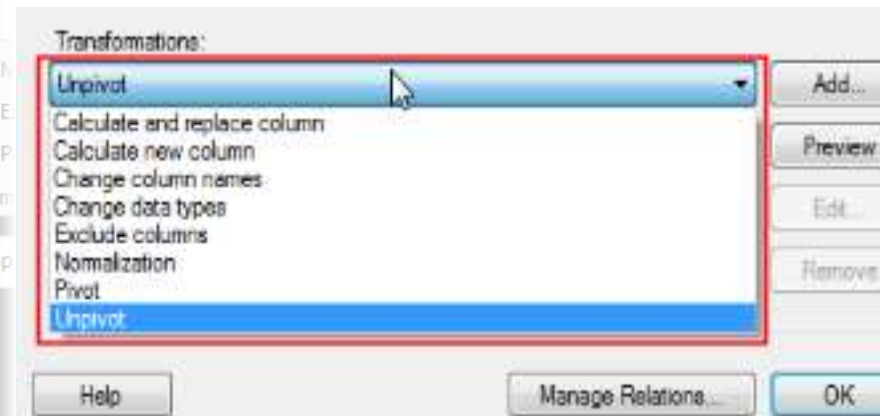
ETL Capabilities

Power BI

- The Data Modelling options that are served after loading the dataset can create complex relationships between tables, add columns and rows, import from one table to the other, join, filter and much more. This feature, in some cases, requires advanced knowledge, but the options that are available are infinite

Spotfire

- All sorts of basic Data Transformations can be performed using built in data transformations.

- Can utilize capabilities of R in transforming data through data functions

Natural Language Processing

Power BI

- First in class feature of Q&A on data using NLP search engine.
- Directly generates visuals from natural language(English)
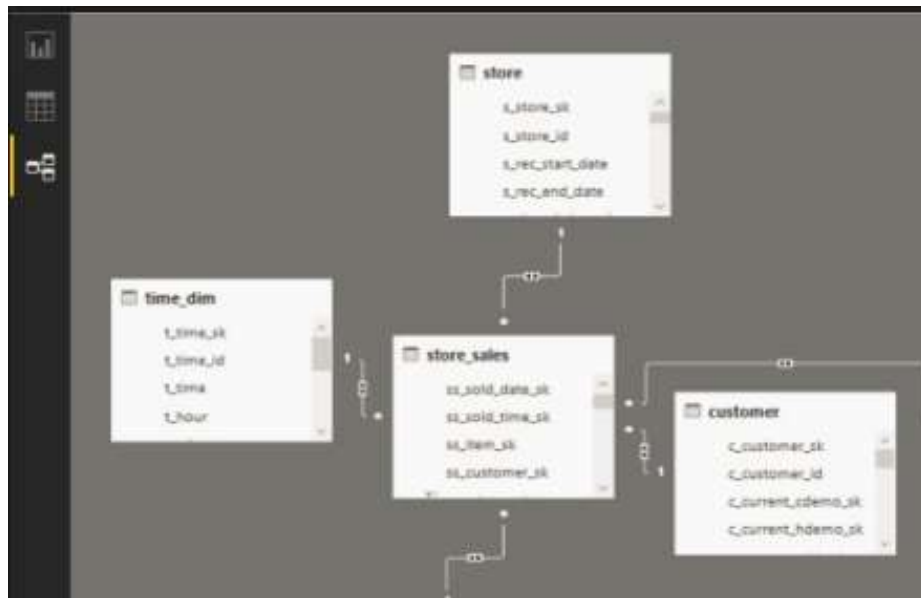
Spotfire

- AI driven data mashup
- Spotfire Data Catalog applies text-mining algorithms to automatically discover and infer hidden relationships among tables
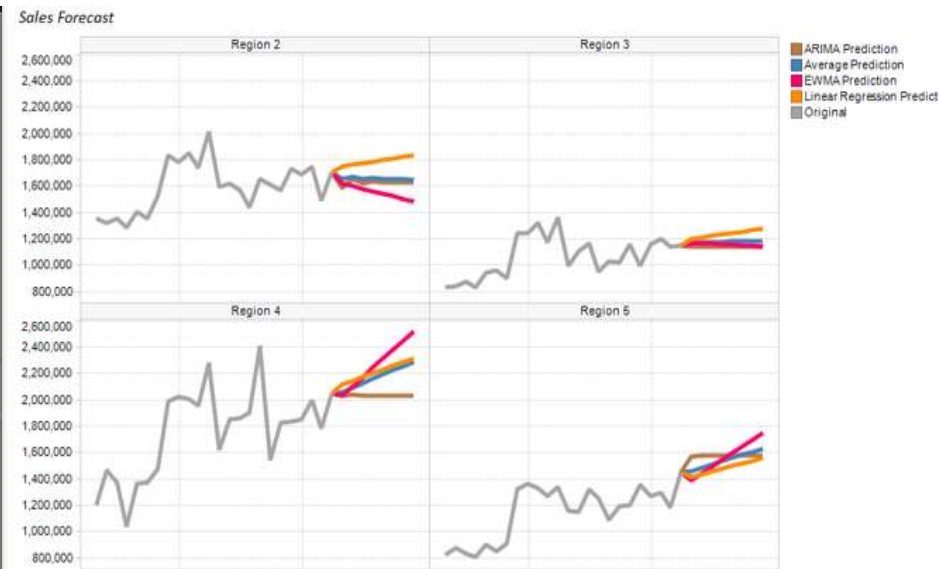
Advanced analytics

Power BI

- Incorporates R language based visualizations, clustering and regression methods
- Relationship modification and schema design
- Custom Visuals with built in machine learning algorithms

Spotfire

- Inbuilt TERR engine to support R and provides all sorts of predictive methodologies.
- In house clustering and regression methods
- API interaction through Iron Python

Integration and Sharing

Power BI

- Possibility of selectively displaying or hiding information.
- Row level security through user group restrictions
- Microsoft Power BI integrates with Microsoft Dynamics, Salesforce, Google Analytics, Microsoft Excel.
- Power BI is integrated into the Microsoft Office 365 Suite, which means that it is highly compatible with all Microsoft (Office) applications such as Excel and others like SharePoint
- Reports can be seamlessly swapped between Excel and Power BI Desktop

Spotfire

- Reports can be integrated into third party applications.
- Limited Integration as compared to other tools.
- Sharing is possible only with in the spotfire user group
- Row level security obtained through personalized information links
- LDAP Integration for systems deployed on dedicated physical machines.

Pricing

Power BI

- Wins hands down on all other available tools in market
- Each professional license costs 10$ per month
- Premium service with dedicated cloud node is available at 4995$ per month

Spotfire

- Expensive as compared to others
- Each analyst license costs 200$ per month
- On premise installation and licensing is quotation based

Maintenance, Updates and Scaling

Power BI

- Easy Maintenance due to cloud hosted services
- Dedicated clouds are provided with Power BI Premium
- Power BI selects new features to include in its updates based on requests made by end users through the Power BI Community portal.
- Provides Weekly updates
- Premium comes with 1 TB of storage and data sets are not constrained in size
- Service is effectively infinitely scalable
- Excellent customer support and problem solving

Spotfire

- Little maintenance is required for hybrid architectures.
- Cloud hosted servers are highly available and fault tolerant
- Provides monthly or yearly updates
- Scalable with both cloud and dedicated servers
- Community and customer support are hassle free
- Automatic upgradation of clients through server services.
- Documentation is available online

Learning and User Community

Power BI

- Power BI posses stronger user community due to extensive usage and gets a thumping response from user groups
- Solutions to many unknown problems can be found from user groups
- Learning DAX expressions need little attention but many online resources are available

Spotfire

- Has a good user community.
- All sorts of doubts can be posted on community and are resolved through Dr. Spotfire sessions.
- Learning spotfire is easy but resources present online are limited.

What is your choice now