# Scholarly Response 1 - DSS, BI, and BI Analytic

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# From a Decision Support Systems (DSS) perspective, Excel is a handy and easy-to-use tool for organizing, analyzing, and making data-based decisions. It lets users manage and import data from different sources while offering built-in functions to help with calculations and exploring different scenarios. Excel’s charts and pivot tables make understanding and presenting data easier. Although it’s widely used and affordable, Excel struggles with very large data and isn’t great for teamwork in real-time. Still, it’s a go-to tool for many when it comes to basic decision-making tasks.

Tableau is a leading Business Intelligence (BI) tool popular for businesses to easily make sense of their data. It lets people create clear, interactive charts and dashboards without needing to know much about coding. Tableau connects to many different types of data sources, like spreadsheets, databases, and cloud services, allowing businesses to access real-time data from multiple places. This makes it easier for companies to spot trends, track performance, and make informed decisions based on up-to-date information. Tableau also makes it simple for teams to share reports and insights, helping everyone stay on the same page and work together more effectively.

From an advanced analytics perspective, Looker offers powerful capabilities that extend beyond traditional BI reporting. It goes beyond simple reporting by allowing complex calculations and custom metrics through its LookML tool. Looker also connects with machine learning platforms, so users can run models that predict future trends, detect unusual data patterns, or forecast outcomes directly in the tool. This helps businesses spot trends and make smarter decisions faster. You can also break down data into specific groups to see how they behave over time. Plus, its API lets you embed these insights into other tools, making it versatile and easy to integrate into daily workflows.

Sharda, Delen, & Turban (2014) describe Decision Support Systems (DSS) as tools that help people make decisions by organizing and analyzing data, usually with features like what-if scenarios and data management. Excel fits this role well because it’s easy to use, helps users run calculations, and look at different scenarios. But, Excel struggles with big data and real-time teamwork, so it’s not ideal for more complicated decision-making.

Business Intelligence (BI) tools, according to Sharda et al., focus on analyzing and reporting data to help users understand it and make informed decisions. Tableau is a great example of a BI tool because it makes it easy for users to create clear, interactive charts and dashboards without needing advanced skills. It connects to many data sources and gives businesses real-time insights, making it perfect for tracking performance and spotting trends quickly.

BI Analytics tools are expected to go beyond basic reporting and offer more advanced features like predictive analytics and detailed data exploration. Looker fits this description because it not only provides reporting but also allows businesses to predict future trends, find patterns, and get deep insights into their data. It connects with machine learning tools and lets companies break down data into smaller groups, helping them make smarter decisions faster.

In short, Excel is great for basic decision-making, Tableau is excellent for visualizing and reporting data, and Looker takes it a step further with advanced analytics and predictive insights.

References

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