Let your Data Drive your Future with Predictive Analytics
The Need for Data-Driven Decision-Making

Enterprises have begun to recognize the importance of accessing and combining all business-critical data to get a better understanding of how a company performs. Connecting disparate systems to make data consumable can be a complex process, but once that effort is complete, businesses can utilize analytics solutions to visualize and interpret the data in an easily digestible manner.

A business cannot transform into a digitally native enterprise until it uses its data to make intelligent decisions. These data-driven decisions provide an important edge and help separate a business from its competitors. Predictive analytics tools, such as IBM SPSS Statistics, ultimately inform such data-driven decisions.
The importance of predictive analytics

Companies of all sizes are facing unprecedented challenges when it comes to managing data. In addition to the exponential increase in volume of data, companies are faced with the increasing complexity of data caused by new technologies such as social media and the internet of things (IoT).

To address these challenges, companies need to gather and analyze large volumes of data, both structured and unstructured, from different sources.

Companies need to find trends and patterns in historical data and identify future opportunities and risks. Predictive analytics solutions have varied applications in many industries. In the healthcare industry, you can analyze patient outcomes. Retailers can use predictive analytics solutions to predict buying behavior to better stock different locations based on trends. In market research, you can easily analyze customer segments and customer satisfaction. Similarly, educational institutions can predict student behavior and analyze institutional performance. Even governments and law enforcement agencies can use predictive analytics to study epidemic surveillance and analyze crime patterns.

Predictive analytics solutions analyze historical and current data to understand products, consumers and behaviors and identify potential opportunities and risks.

Predictive analytics improves data analysis and segmentation, helping with decision-making for complex projects. It allows decision-makers to focus on what matters most for the company, such as strategic objectives and identifying potential threats to respond in a proactive manner.

“Analytics, internet of things to drive data volumes to 163ZB by 2025.”
computerweekly.com

28% of a data analyst’s time is spent on data prep.
olap.com
Companies turn to predictive analytics software to address 3 major challenges:

1. Extract insights from large volumes of data

2. Reduce the time spent on data preparation to allow them to focus on analysis and insights

3. Improve adoption by avoiding the complexity of monolithic solutions that are difficult to use and maintain
Challenge 1

Companies analyze large volumes of data of multiple types and from multiple sources.

To address this challenge, a leading predictive analytics solutions should provide robust features for:

- Management of large amounts of data

"SPSS can handle the sheer amount of data you might be looking to process for a research project like content analysis or surveying."

Jade M., Higher Education

- Data transfer and import/export

"I really enjoy the ability to easily transfer data between Excel, Google Sheets, and SPSS."

Brian H., Religious Institutions

"It's often easier to import a text file into SPSS and export it to Stata than it is to import the text file directly into Stata. For me, SPSS is an indispensable tool for managing data, whether or not I use it for the analysis."

G2 Crowd reviewer, Higher Education

IBM SPSS Statistics meets the requirements of 84% of the reviewers.
Challenge 2

Companies need to eliminate time spent preparing data. For example, according to Xplenty, Business Intelligence professionals, spend 50-90% of their time “cleaning” raw data for analytics. Simplifying the way data is captured and shared with users can reduce this wasted time.

To address this challenge, companies expect the following from a predictive analytics solution:

**Robust out-of-the-box features that are intelligent and easy to use**

“SPSS is intelligent in that it automatically ignores common issues such as missing data points so that our data doesn’t get skewed, which saves time and money!”

-Rebecca M., Higher Education

“The business problems I solved with SPSS pertains to marketing research. Using SPSS helps determine how our consumers perceived our brand, based on survey results. This helps with positioning and identifying our target market.”

-Janeth W., Consumer Goods

**Specific features for the industry and the main activities of the company**

“The benefits I have realized is huge time savings over other programs that are harder to use or do not have all the basic stats tests available.”

-Elizabeth M., Higher Education

81% of IBM SPSS Statistics reviewers are satisfied with the ease of use of the solution.
To improve user adoption and satisfaction, companies need powerful, flexible, and affordable solutions that can be used to analyze complex data but are easy to use and help simplify decision making.

It’s also important to work with a reliable vendor that offers good support and training, which positively impact user adoption and satisfaction.

Deliver a multitude of features that users can choose from:

“IBM SPSS allows the researcher to choose from a multitude of statistical analyses in order to discover the significance of collected data. This software package also has every means of statistical analysis imaginable, for any type of data assessment.”

Gabriel S., Higher Education

(Challenge 3 continues on the next page)
Challenge 3 (continued)

Easy to use and maintain:

“While there are many good statistical packages, SPSS is the only one in which it is easy to edit the data or variable properties in the data view.”

Brian H., Religious Institutions

Training and support:

“I also appreciate that SPSS also provides excellent training for its users. This way, if I do not know how to run a certain type of test or analysis, it is simple to find the solution for it with the available training. This makes running analyses much less painful for the software users.”

Shannon R., Higher Education

77% of reviewers mentioned that it’s easy to do business with IBM SPSS Statistics

Ease of admin: 77%
Ease of use: 81%

IBM SPSS Statistics is easy enough for small and mid-market businesses, yet robust enough for enterprise-level businesses.
As mentioned above, companies using predictive analytics need software that is easy to use, meets their functional requirements, and is not expensive. This is how some of the predictive analytics vendors compare based on these criteria:

**Ease of use:**

"IBM SPSS Statistics is a great tool for users to be able to conduct basic statistical analyses without knowing significant amounts of programming/coding language like SAS."

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**Users rate SAS more expensive than IBM SPSS Statistics.**

- **Inexpensive**
  - IBM SPSS Statistics: 81%
  - SAS: 4%
  - Difference: 77%

- **Expensive**
  - IBM SPSS Statistics: 4%
  - SAS: 9%
  - Difference: 5%

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**Meets industry-specific requirements:**

- For the Research industry:
  - IBM SPSS Statistics: 84%
  - SAS: 4%
  - Difference: 80%

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**Points scored**

- IBM SPSS Statistics: 6 points
- SAS: 9%
- Difference: 3 points

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**Rochelle C.F., Higher Education**

- 4% higher than SAS
- 4% higher than SAS
- 9% higher than SAS
Companies using predictive analytics software expect to achieve the following benefits:

Quickly and efficiently perform data analysis:

“The SPSS software is also suitable for usage on collaborative projects since it is quite popular and most universities have access to it for their research and staff members.”

— Niharika G.

“SPSS helps me analyze relationships among variables, by doing regression analysis.”

— Bernardo C., Marketing and Advertising

Save time so they can focus on other activities:

“The benefit I have realized is a huge time savings over other programs.”

— Elizabeth M., Higher Education
Predictive analytics reviewers are more likely to recommend solutions that deliver the benefits mentioned above. Vendors who are reliable and experienced as well as provide great support and training get high marks.

According to mid-market users, **SPSS Statistics** rates **higher for Data Interaction than Advanced Analytics**

According to users, **SPSS Statistics** rates **higher for average level of experience (yrs.) than competitors.**

**Likely to Recommend:**
- **81%** SAS Advanced Analytics
- **82%** IBM SPSS Statistics

“People who know SPSS will want to continue using it, and it’s a good investment for your business to make sure your analysts can do their job comfortably.”

Brian H., Religious Institutions

“I would consider using IBM SPSS statistics for any data analysis needs. It is quite useful for anyone, especially for individuals without strong statistical analysis skills.”

Shannon R., Higher Education
Conclusion

Predictive analytics is a necessary, key element of digital transformation. No longer are basic analytics enough. Instead, users need actionable and intelligent insights to drive true business evolution.

Data scientists and analysts have proven to be critical employees who require intelligent, yet easy-to-use solutions to deliver the actionable business insights required of them. This is where predictive analytics tools play an essential role.

IBM and SAS are two of the most important vendors offering predictive analytics software. They both offer robust features but IBM excels in key areas:

- It is easier to use
- It is more affordable
- It has more experience in the market

To exemplify why IBM’s overall score is higher and customers switch from SAS to IBM:

"SPSS is more affordable and easier to use."

G2 Crowd reviewer